

Brow Avenue Green Infrastructure Project

Brow Ave. & East 55th St.
 Village of Newburgh Heights
 Cuyahoga County, Ohio
 August, 2015

ENGINEERING APPROVALS

APPROVAL BY: DAVID G. KROCK, VILLAGE OF NEWBURGH HEIGHTS ENGINEER DATE 8/13/2015
 APPROVAL BY: NORTHEAST OHIO REGIONAL SEWER DISTRICT DATE _____



VICINITY MAP
 NOT TO SCALE

GAS NOTE
 DEO - The East Ohio Gas Company, Ohio Division, 1-800-362-7557
 Lines labeled "G" or "Gas" represent DEO facilities on this set of plans

SHEET INDEX

- 1 - Title Sheet
- 2 - Existing Conditions
- 3 - Demolition Plan
- 4 - Site Plan
- 5 - Utility Plan
- 6 - Grading Plan
- 7 - Sediment Control Plan
- 8 - Landscape Plan
- 9 - Traffic Control Plan
- 10 - Site Details
- 11 - Utility & Bioretention Details
- 12 - Landscape Plan Details
- 13 - Abbreviated SWPPP Details

OHIO Utilities Protection SERVICE
 800-362-2764 or 8-1-1
 www.oups.org

OGPUPS
 OHIO GAS PIPELINE UTILITY PROTECTION SERVICE
 800-925-0988 or 8-1-1
 www.ogpups.org

DATE	REVISIONS	SHEETS

SHEET	DATE	PROJ NUMBER	END	PROJ MOR	CAZD	COUNTY	CITY/VILLAGE/TOWNSHIP	SCALE	HORZ DATUM	VERT DATUM	REVISIONS		
1 of 13	August 2015	3025-15-0220	100	DB	EBH	CUYAHOCA	NEWBURGH HEIGHTS	H 1" = 1'	V 1" = 1'			Scott R. Bickley, PE Ohio Professional Engineer #71470	ARCHITECTS' BOARD NUMBER 6625 W. SNOWMALE RD., STE. A BRECKSWILLE, OHIO 44141 303.857.2145 OHM-ADVISORS.COM
VILLAGE of NEWBURGH HEIGHTS BROW AVENUE GREEN INFRASTRUCTURE PROJECT TITLE SHEET													

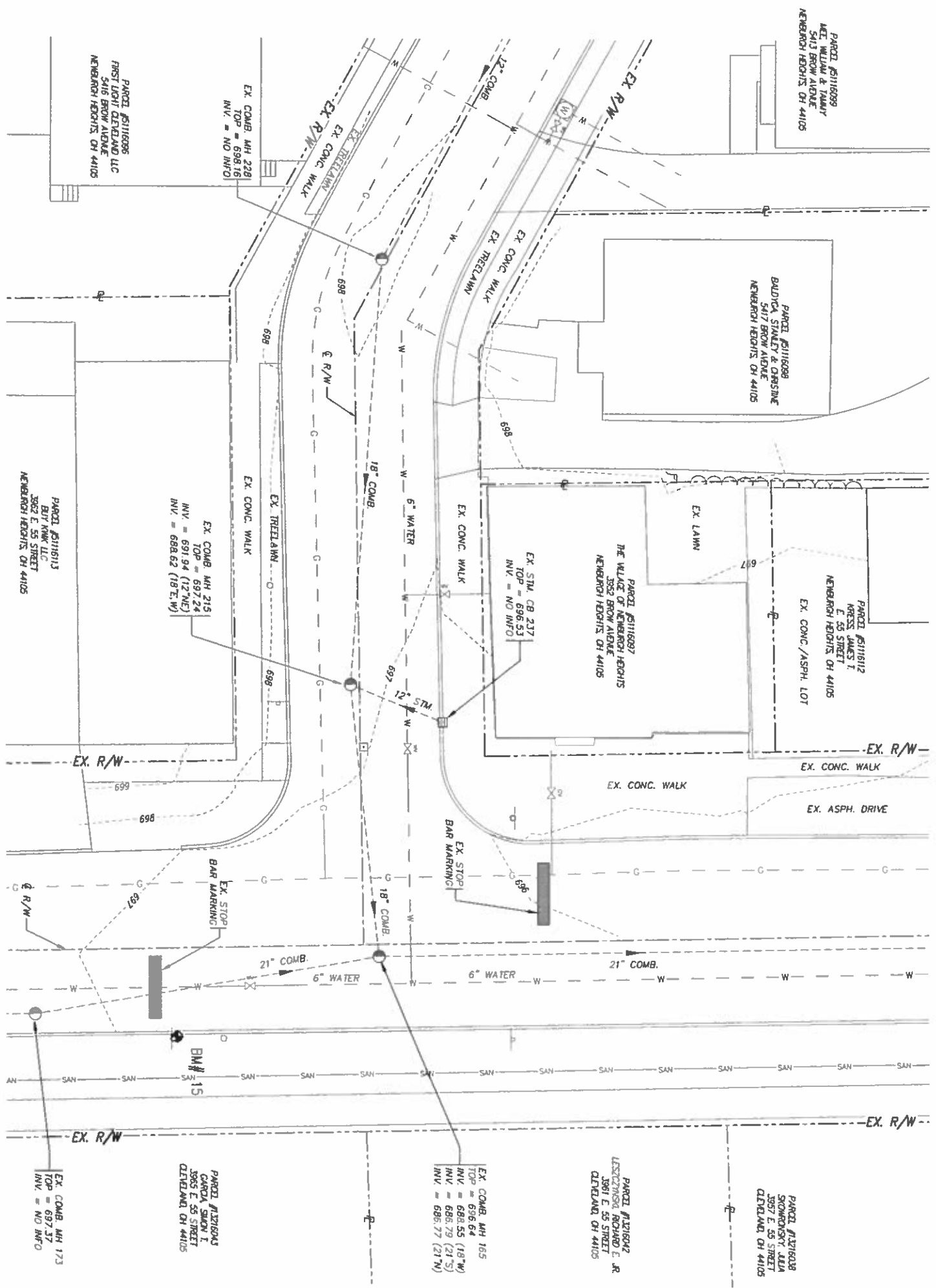
Ohio Utilities Protection Service
 800-362-2764 or 8-1-1
 www.oups.org

OGPUPS
 Ohio Green Power Utility Protection Service

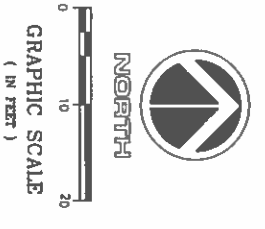
FLOODPLAIN

NO FLOODPLAIN EXISTS ON OR ADJACENT TO PROPOSED SITE IMPROVEMENTS PER FEMA ISSUED FLOOD MAP #30055C0184E, EFFECTIVE DATE DECEMBER 3, 2010.

- EXISTING LEGEND**
- EX. DRAINAGE STRUCTURE
 - EX. MONUMENT BOX
 - EX. UTILITY POLE
 - EX. STORAGE/COMBINATION SEWER
 - EX. WATERLINE
 - EX. GAS LINE
 - EX. SANITARY SEWER
 - EX. WATER METER
 - EX. COMBINATION MANHOLE
 - EX. WATER VALVE
 - EX. SIGN
 - EX. GAS VALVE
 - EX. FENCE
 - EX. 1 FOOT CONTOUR
 - EX. 5 FOOT CONTOUR
 - EX. TREELINE



BENCHMARK No. 15
 BM #15, METAL PIN LOCATED IN WEST SIDE OF POWER POLE ON EAST SIDE OF E. 55TH STREET.
 ELEV. = 698.83



SHEET 2 of 13	DATE: August 2015	PROJ NUMBER: 2015-10-000	DSG: SFB	PROJ MON: DBH	CADD: EBA	COUNTY: CUYAHOGA	CITY/VILLAGE/TOWNSHIP: NEWBURGH HEIGHTS	SCALE: 1" = 40'	HORIZ DATUM: NAD 83	VERT DATUM: MGS	REVISIONS:		
	VILLAGE of NEWBURGH HEIGHTS BROW AVENUE GREEN INFRASTRUCTURE PROJECT EXISTING CONDITIONS												

Ohio
Utilities Protection
SERVICE
Call Before You Dig
 800-362-2764 or 8-1-1
 www.oups.org

OGPIPS
 Ohio Green Infrastructure Protection Program
 800-925-0988 or 8-1-1
 www.ogpips.org

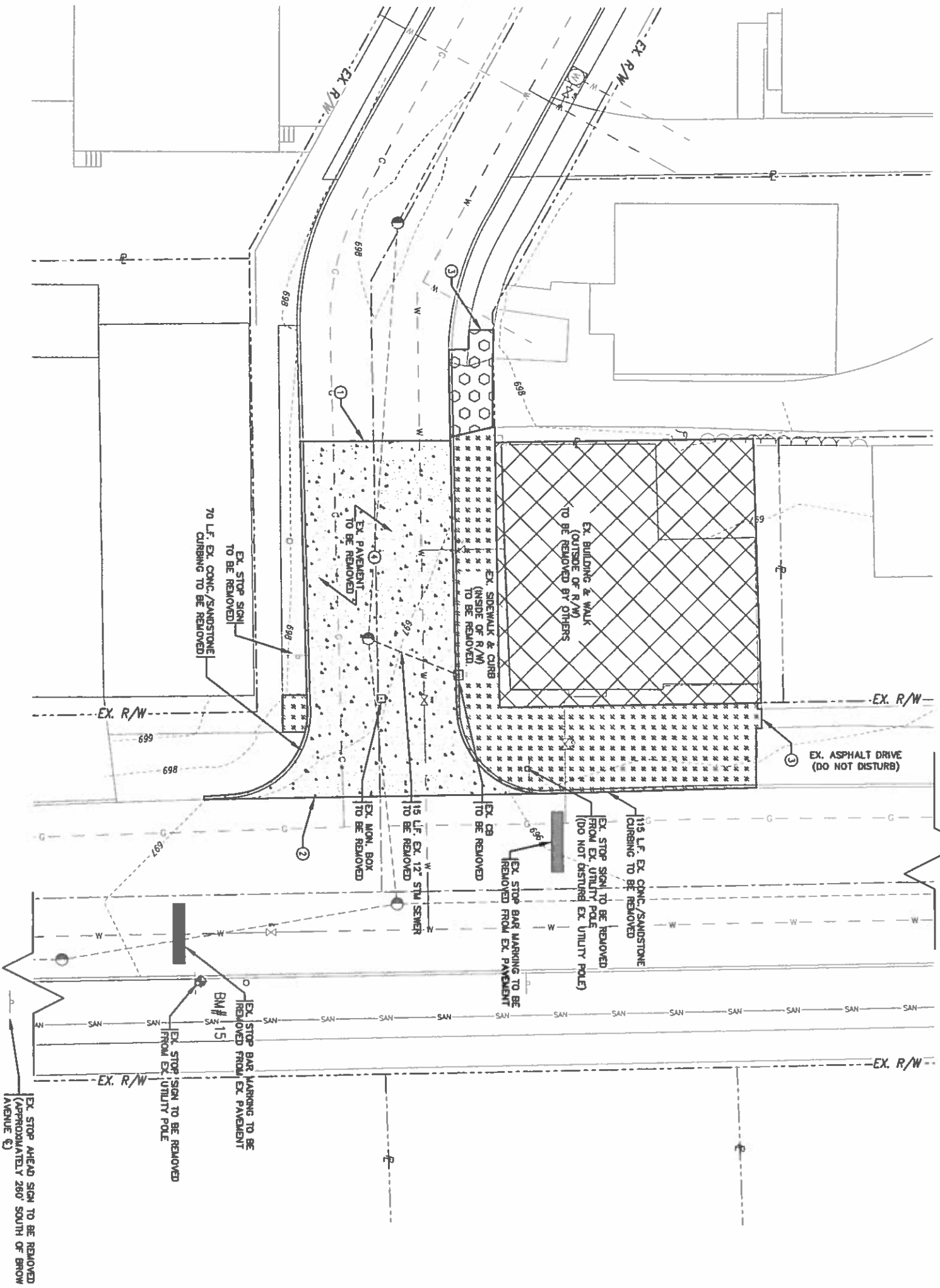
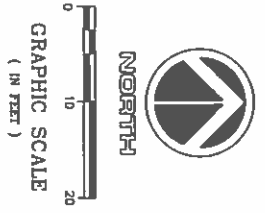
- EXISTING LEGEND**
- EX. DRAINAGE STRUCTURE
 - MONUMENT BOX
 - EX. UTILITY POLE
 - EX. STORM/COMBINATION SEWER
 - EX. WATERLINE
 - EX. GAS LINE
 - SAN EX. SANITARY SEWER
 - W EX. WATER METER
 - ⊙ EX. COMBINATION MANHOLE
 - ⊗ EX. WATER VALVE
 - ⊗ EX. SIGN
 - ⊗ EX. GAS VALVE
 - EX. FENCE
 - EX. 1 FOOT CONTOUR
 - EX. 5 FOOT CONTOUR
 - EX. TREELINE

- KEYNOTES**
1. 25 LF FULL DEPTH SAW CUT
 2. 56 LF FULL DEPTH SAW CUT
 3. CONTRACTOR TO BEGIN REMOVAL OF SIDEWALK AT NEAREST CONSTRUCTION JOINT
 4. PAVEMENT BUILD UP MAY INCLUDE ASPHALT, CONCRETE, OR BRICK

- DEMOLITION PLAN NOTES**
1. CONTRACTOR IS RESPONSIBLE FOR LOCATING, PROTECTING, AND MAINTAINING THE WORKING CONDITION OF ALL EXISTING UTILITIES AND STRUCTURES THAT ARE TO REMAIN ON SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE AT THEIR OWN EXPENSE ANY UTILITIES OR STRUCTURES DAMAGED BY CONSTRUCTION TO THE OWNER'S SATISFACTION.
 2. CONTRACTOR IS RESPONSIBLE FOR PROPERLY DISPOSING AND/OR RECYCLING OF ALL DEMO ITEMS.
 3. CONTRACTOR SHALL COORDINATE UTILITY DISCONNECTS WITH EACH UTILITY OWNER PRIOR TO DISCONNECTION AND REMOVALS.

- DEMOLITION AREAS**
- EX. BUILDING AND WALK (OUTSIDE OF R/W) TO BE REMOVED BY OTHERS
 - EX. SIDEWALK/CURB (INSIDE OF R/W) TO BE REMOVED
 - EX. PAVEMENT/CURB TO BE REMOVED
 - EX. CONC. DRIVE APRON TO BE REMOVED

BENCHMARK No. 15
 BM #15, METAL PIN LOCATED IN WEST SIDE OF PAVEMENT POLE ON EAST SIDE OF E. 54TH STREET.
 ELEV. = 898.85



SHEET 3 of 13	DATE: August 2015	PROJ NUMBER: 2008-15-0228	ENR: SPB	PRODUCED BY: DBH	CHD: EBM	COUNTY: CUYAHOGA	CITY/VILLAGE/TOWNSHIP: NEWBURGH HEIGHTS	SCALE: 1" = 10'	HORIZ DATUM: NAD 83	VERT DATUM: MGS 85	REVISIONS:	Scott R. Bickley, P.E. Ohio Professional Engineer #71470 	 ARCHITECT NUMBER: 08010 880 W. SANDWALE RD., STE. A BREVARD COUNTY, FL 32925 305.857.2745 OHM.ADVISORS.COM
	VILLAGE of NEWBURGH HEIGHTS BROW AVENUE GREEN INFRASTRUCTURE PROJECT DEMOLITION PLAN												

COPYRIGHT 2015 OHM. ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED, OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM.

Ohio
Utilities Protection
SERVICE
Call Before You Dig
 800-362-2764 or 8-1-1
 www.oups.org

OGPIUPS
 Ohio Green Infrastructure Utility Protection Service
 800-925-0988 or 8-1-1
 www.ogpiups.org

- EXISTING LEGEND**
- EX. DRAINAGE STRUCTURE
 - EX. UTILITY POLE
 - EX. STORAGE/COMBINATION SEWER
 - EX. WATERLINE
 - EX. GAS LINE
 - EX. SANITARY SEWER
 - ⊞ EX. WATER METER
 - ⊞ EX. COMBINATION MANHOLE
 - ⊞ EX. WATER VALVE
 - ⊞ EX. SIGN
 - ⊞ EX. GAS VALVE
 - EX. FENCE
 - EX. 1 FOOT CONTOUR
 - EX. 5 FOOT CONTOUR
 - EX. TREELINE

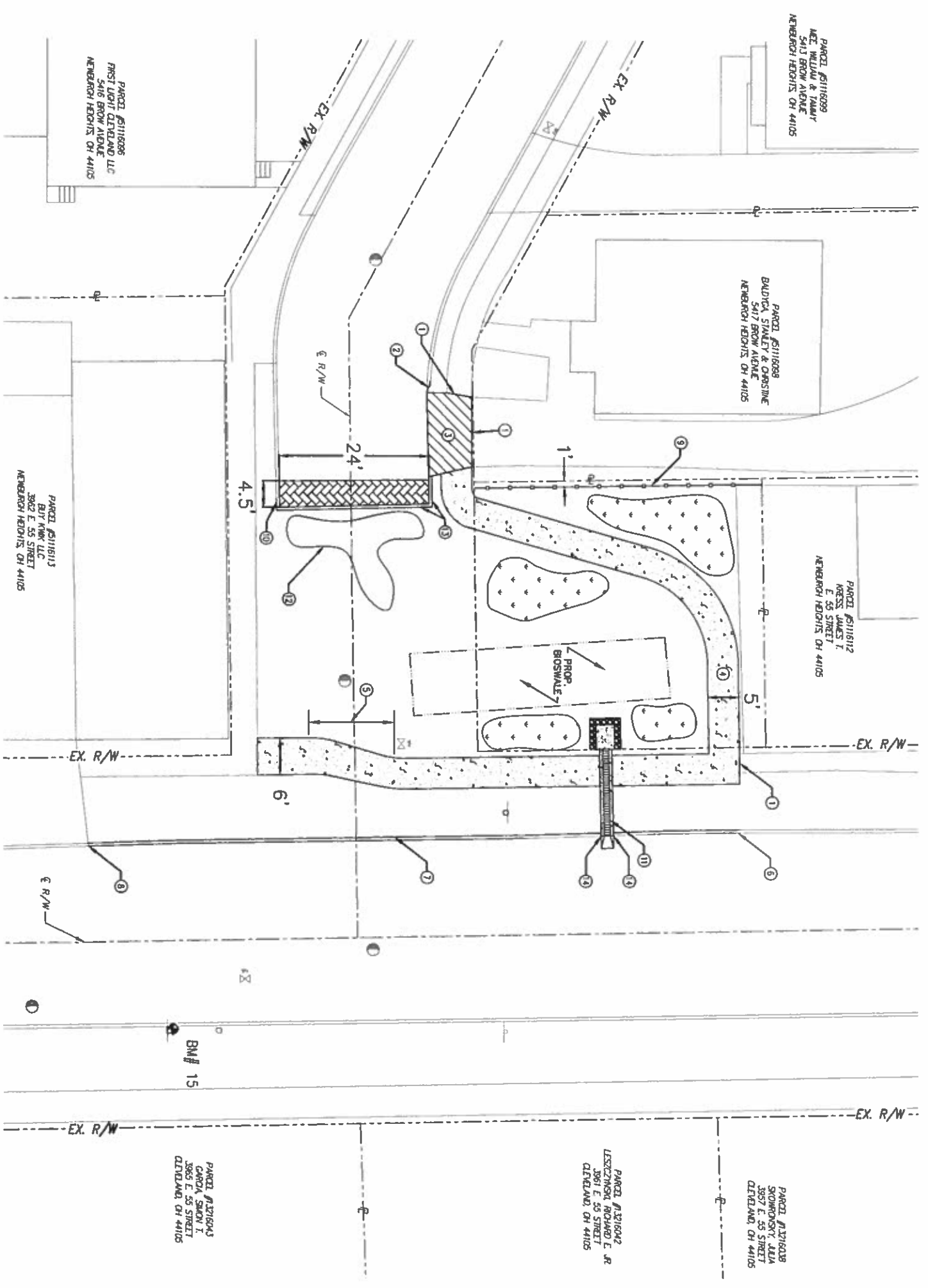
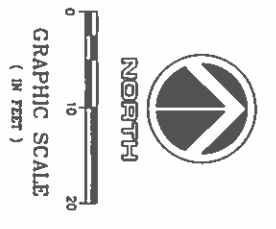
PROPOSED LEGEND

- ▨ PROPOSED CONCRETE DRIVE APRON, SEE DETAIL ON SHIT 10
- ▨ PROPOSED CONCRETE WALK, SEE DETAIL ON SHIT 10
- ▨ PROPOSED LANDSCAPED ISLAND
- ▨ PROPOSED CONCRETE PAVEMENT (MATCH EXISTING ROADWAY GRADE) SEE DETAIL ON SHIT 10
- LIMIT OF PROPOSED BIKESWALE SEE DETAIL ON SHIT 11
- PROPOSED WHITE VINYL FENCE

KEYNOTES

- 1 MATCH EXISTING PAVEMENT ELEVATION
- 2 PROVIDE TRANSITION TO EXISTING CURB AS NEEDED TO MATCH TOP OF CURB ELEVATION
- 3 10 S.Y. CONC. DRIVE APRON, SEE DETAIL SHIT 10
- 4 PROPOSED 750 SF CONC. SIDEWALK, SEE DETAIL SHIT 10
- 5 TRANSITION SIDEWALK WIDTH FROM 5' TO 6' OVER APPROX. 15' L.F. TO MATCH EXISTING WALK
- 6 PROPOSED CURB TAPER FROM 6" TO EXISTING CURB HEIGHT, OVER 1 L.F.
- 7 10S L.F. PROP. GOOD TYPE 6 CONC. CURBING, SEE DETAIL SHIT 10
- 8 BEAM CONC. CURBING WITH TAPER FROM 0" TO 6" OVER 1 L.F.
- 9 48 L.F. PROP. 4" TALL WHITE VINYL FENCING, SEE DETAIL SHIT 10
- 10 PROVIDE A TAPER OF THE EXISTING CURB FROM 6" TO 0" OVER 1 L.F., AS NEEDED, TO PROVIDE SMOOTH TRANSITION INTO EXISTING GRADE
- 11 PROPOSED TRENCH DRAIN, SEE DETAIL SHIT 10
- 12 PROPOSED LOCAL DEPRESSION/TURF SACRIFICE AREA
- 13 3S L.F. PROP. CONCRETE BUFFER STRIP TO MATCH PROP. PAVEMENT GRADE, SEE DETAIL SHIT 10
- 14 PROPOSED CURB TAPER, SEE DETAIL SHIT 10

BENCHMARK No. 15
 BM #15, METAL PIN LOCATED IN WEST SIDE OF POWER POLE ON EAST SIDE OF E. 55TH STREET
 ELEV. = 698.83



SHEET 4 of 13	DATE 08/18/2015 PROJ NUMBER 2015-15-0228 ENG SRB PROJ MGR DBN CADD EBM COUNTY CUYAHOGA CITY/VILLAGE/TOWNSHIP NEWBURGH HEIGHTS SCALE 1" = 10' HORIZ DATUM VERT DATUM	REVISIONS Scott R. Bickley, PE Ohio Professional Engineer #71470	 REGISTERED PROFESSIONAL ENGINEER STATE OF OHIO SCOTT R. BICKLEY E-71470	ADVERTISED LICENSE NUMBER 6820 W. SNOWMALE RD., STE. A BRECKENVILLE, OHIO 43111 330.657.2145 OHM-ADV-05095.COM
VILLAGE of NEWBURGH HEIGHTS BROW AVENUE GREEN INFRASTRUCTURE PROJECT SITE PLAN				

Ohio
Utilities Protection
SERVICE
Call Center 1-800-362-2764 or 8-1-1
www.oups.org

OGPUPS
OHIO GAS PUBLIC UTILITIES SERVICE
800-925-0988 or 8-1-1
www.ogpups.org

UTILITY NOTES

- CONTRACTOR IS TO FIELD VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES THAT WOULD PREVENT CONSTRUCTION PER THESE DOCUMENTS PRIOR TO BEGINNING WORK.
- THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

KEYNOTES

- USE HYDRAULIC CEMENT TO CREATE WATER-TIGHT SEAL BETWEEN PROPOSED 12" PIPE AND EX. BRICK COMBINATION MANHOLE #215. USE FERROD ADAPTER TO CONNECT PROPOSED 12" PVC PIPE TO PROPOSED VCP PIPE. CONCRETE BRIDGE FEMMO TO PREVENT PIPE SEPARATION.
- EX. 6" W. VALVE TO BE ADJUSTED TO GRADE AS PER 0001 ITEM 638.
- EX. WATER SERVICE CONNECTION TO BE PLUGGED AND ABANDONED BY THE CLEVELAND WATER DIVISION. CONTRACTOR WILL HAVE TO COORDINATE WITH THE CLEVELAND WATER DIVISION WHEN THIS ABANDONMENT WILL TAKE PLACE.

UTILITY CONTACTS

GAS DOMINION EAST OHIO GAS (330) 654-2400	ELECTRIC THE ILLUMINATING COMPANY (440) 546-8869	SEWER COLUMBIA COUNTY PUBLIC WORKS CONTACT SITE 70TH (216) 443-8215
WATER CITY OF CLEVELAND DIVISION CONTACT: PATYON HALL (216) 664-2444	TELEPHONE AT&T (330) 384-8057	CABLE TIME WARNER (216) 575-8016

BENCHMARK No. 15

BM #15 METAL PIN LOCATED IN WEST SIDE OF POWER POLE ON EAST SIDE OF E. 55TH STREET.
ELEV. = 698.83

NORTH

GRAPHIC SCALE
(IN FEET)

0 10 20

EXISTING LEGEND

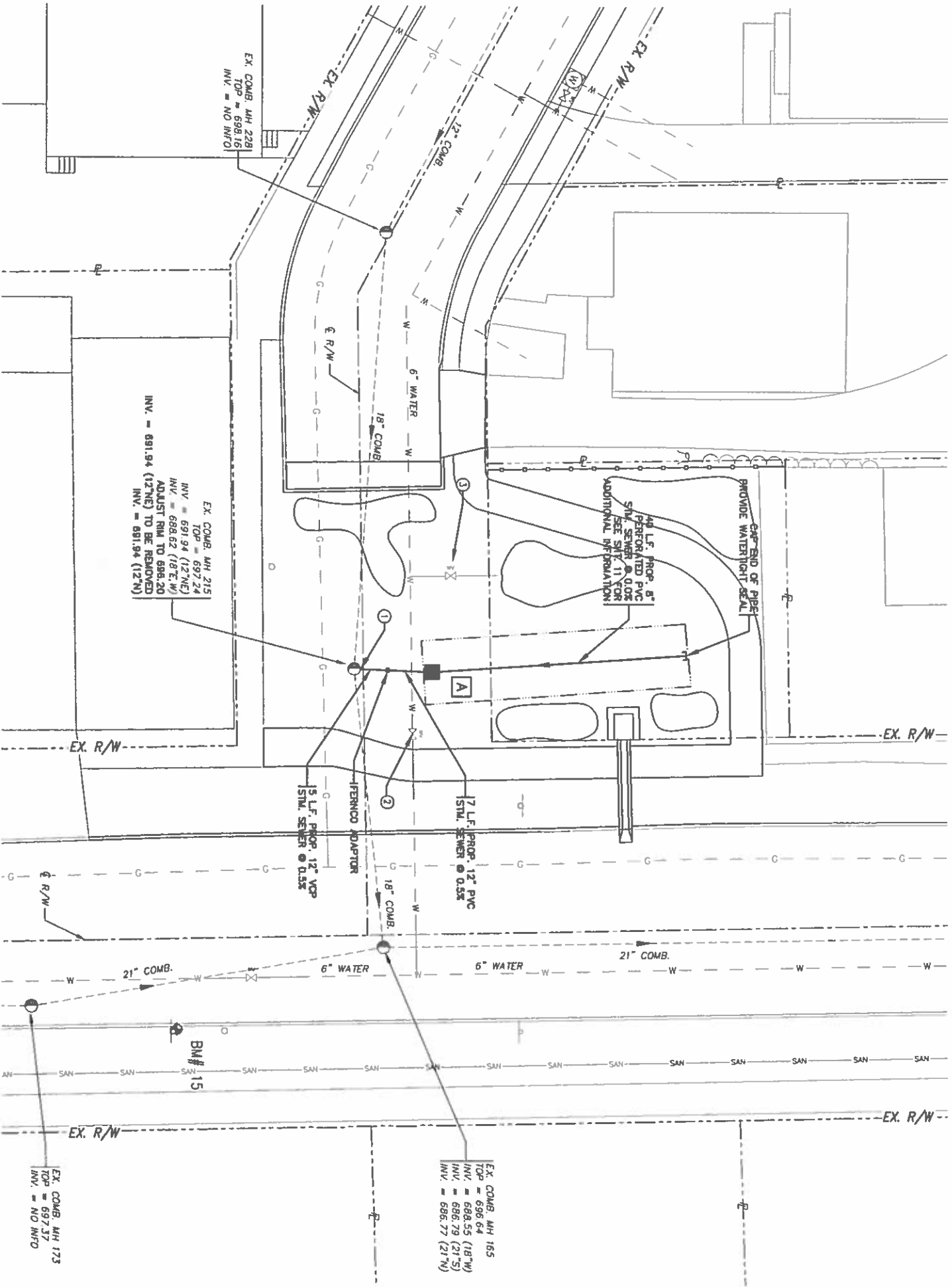
- EX. DRAINAGE STRUCTURE
- MONUMENT BOX
- EX. UTILITY POLE
- EX. STORM/COMBINATION SEWER
- EX. WATERLINE
- EX. GAS LINE
- EX. SANITARY SEWER
- EX. WATER METER
- EX. COMBINATION MANHOLE
- EX. WATER VALVE
- EX. SIGN
- EX. GAS VALVE
- EX. FENCE
- EX. 1 FOOT CONTOUR
- EX. 5 FOOT CONTOUR
- EX. TREE LINE

PROPOSED LEGEND

- PROP. CB
- PROP. STORM SEWER

STORM SEWER STRUCTURES

- A** PROP. 000T CB 2-3 (MODIFIED) OUTLET STRUCTURE (SEE DETAIL, SHIT. 11)
- RM# = 685.00
INV. = 692.00 (12" S)
INV. = 690.20 (8" N)
INV. = 692.50 (8" N) (AFTER ELBOW)



SHEET 5 of 13	DATE: August 2015	PROJ NUMBER: 305-15-0020	END: S&B	PROJ MGR: DBH	CAPO: GJM	COUNTY: CUYAHOGA	CITY/TOWNSHIP: NEWBURGH HEIGHTS	SCALE: 1" = 40'	HORIZ DATUM: NAD 83	VERT DATUM: MGS	REVISIONS:	<p>Scott R. Bickley, P.E. Ohio Professional Engineer #71470</p>	<p>ARCHITECT ENGINEER PLANNERS 6820 W. BROADWAY RD., STE. A BROADVIEW, OHIO 44141 330.877.2145 OHM-ADVISORS.COM</p>
	VILLAGE of NEWBURGH HEIGHTS BROW AVENUE GREEN INFRASTRUCTURE PROJECT UTILITY PLAN												
	COPYRIGHT 2015 OHM ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM												

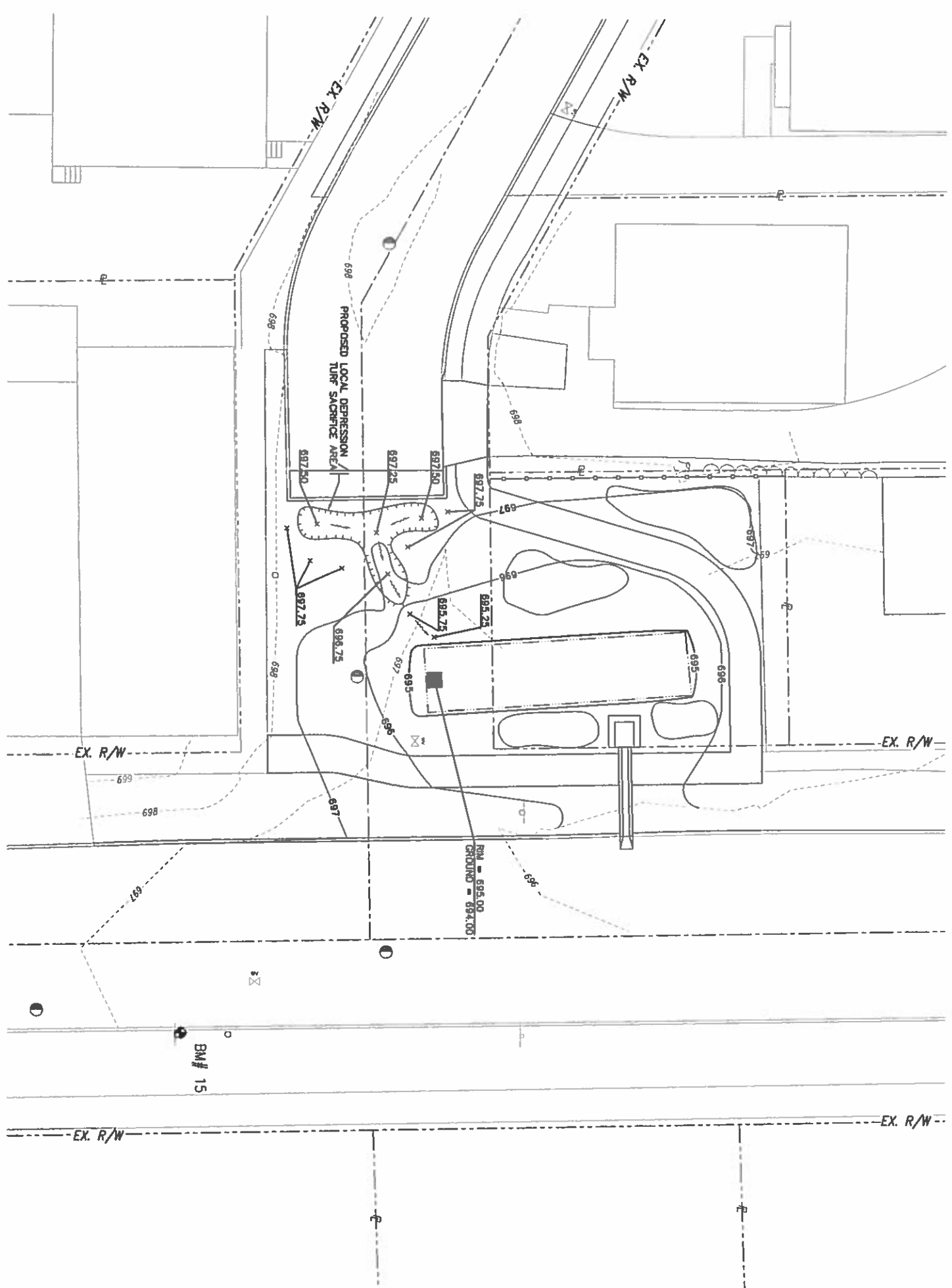
Ohio Utilities Protection SERVICE
 Call Before You Dig
 800-362-2764 or 8-1-1
 www.oups.org

OGPUPS
 Ohio Green Public Utilities
 800-925-0988 or 8-1-1
 www.ogpups.org

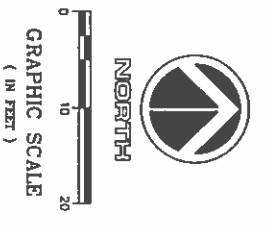
- EXISTING LEGEND**
- EX. DRAINAGE STRUCTURE
 - MONUMENT BOX
 - EX. UTILITY POLE
 - EX. STORM/COMBINATION SEWER
 - EX. WATERLINE
 - EX. GAS LINE
 - SAN --- EX. SANITARY SEWER
 - ⊞ EX. WATER METER
 - ⊞ EX. COMBINATION MANHOLE
 - ⊞ EX. WATER VALVE
 - ⊞ EX. SIGN
 - ⊞ EX. GAS VALVE
 - EX. FENCE
 - EX. 1 FOOT CONTOUR
 - EX. 5 FOOT CONTOUR
 - ~ EX. TREELINE
- PROPOSED LEGEND**
- PROP. CB

GRADING NOTES:

1. ALL NEW GRADED AREAS SHALL BE GRADED TO ENSURE POSITIVE DRAINAGE TO THE BORENTRON CELL



BENCHMARK No. 15
 BM #15, METAL PIN LOCATED IN WEST SIDE OF POWER POLE ON EAST SIDE OF E 55TH STREET
 ELEV. = 698.83

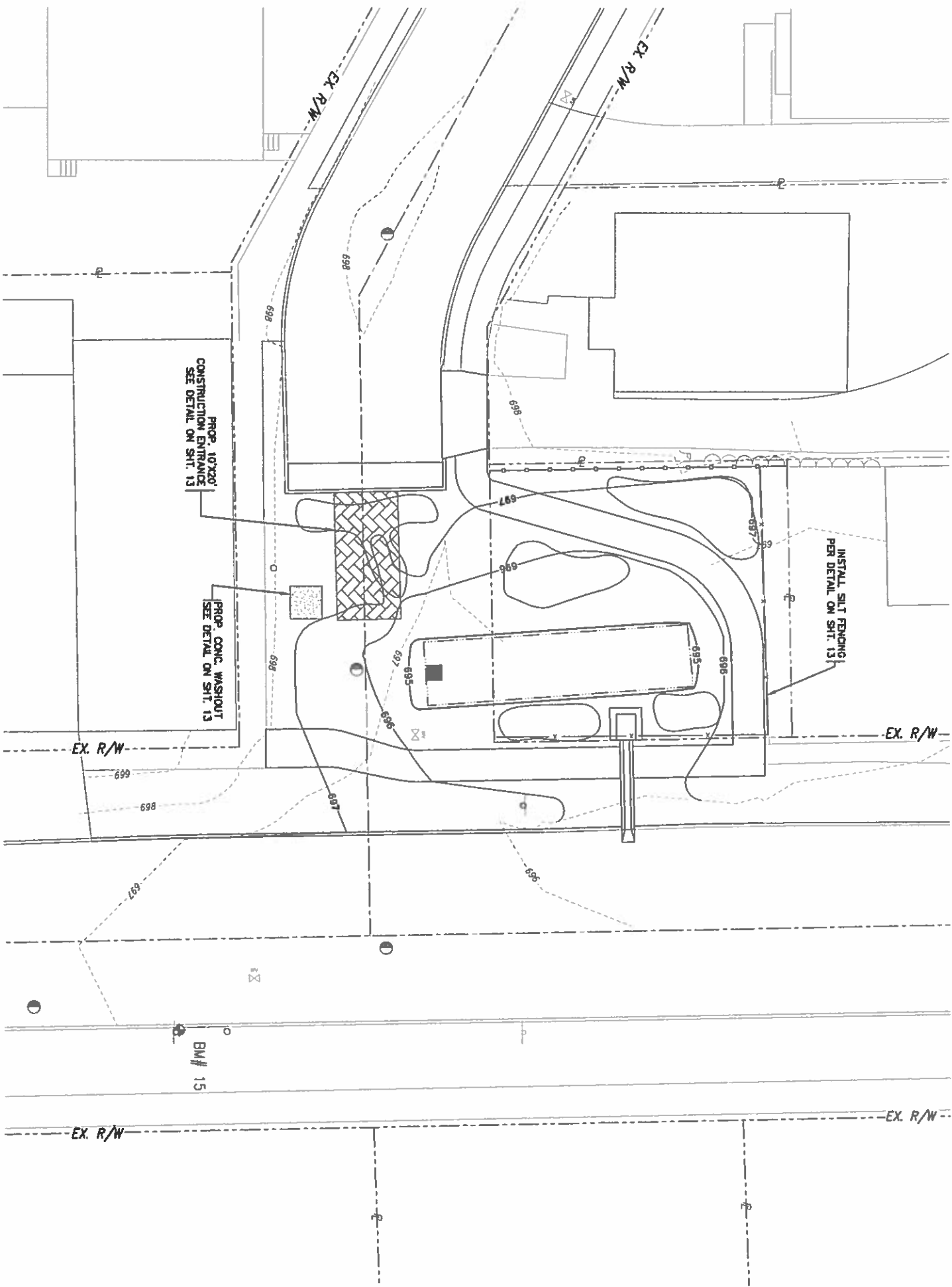


6 of 13	DATE: April 2015	PROJ NUMBER: 2009-15-0020	ENGR: SPB	PROJ MGR: DBH	CHD: LBM	COUNTY: CUYAHOGA	CITY/VILLAGE/TOWNSHIP: NEWBURGH HEIGHTS	SCALE: 1" = 4' 0"	HORIZ DATUM: NAD 83	VERT DATUM: MGS 85	REVISIONS:	<p>Scott R. Bickley, P.E. Ohio Professional Engineer #71470</p>	<p>OHM ADVISORS.COM 6820 W. SNOWVILLE RD., STE. A BRENDAVALE, OHIO 44111 330.627.2145</p>
	VILLAGE of NEWBURGH HEIGHTS BROW AVENUE GREEN INFRASTRUCTURE PROJECT GRADING PLAN												
	COPYRIGHT 2015 OHM ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM												

Ohio
Utilities Protection
SERVICE
Call Center 1-800-362-2764
 800-362-2764 or 8-1-1
 www.oups.org

OGPIPS
OHIO GRADING & PAVEMENT IMPROVEMENT SERVICES
 800-925-0988 or 8-1-1
 www.ogpips.org

- EXISTING LEGEND**
- EX. DRAINAGE STRUCTURE
 - EX. MONUMENT BOX
 - EX. UTILITY POLE
 - EX. STORM/COMBINATION SEWER
 - EX. WATERLINE
 - EX. GAS LINE
 - EX. SANITARY SEWER
 - EX. WATER METER
 - EX. COMBINATION MANHOLE
 - EX. WATER VALVE
 - EX. SIGN
 - EX. GAS VALVE
 - EX. FENCE
 - EX. 1 FOOT CONTOUR
 - EX. 5 FOOT CONTOUR
 - EX. TREELINE
- PROPOSED LEGEND**
- PROP. CB
 - PROP. SILT FENCE
 - CONSTRUCTION ENTRANCE
 - CONCRETE WASHOUT AREA

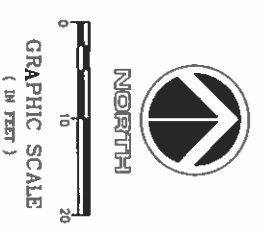


SEDIMENT CONTROL PLAN NOTES

- CONTRACTOR IS RESPONSIBLE FOR PREVENTING ANY SILT BUILD UP WITHIN THE BIOSWALE.

BENCHMARK No. 15

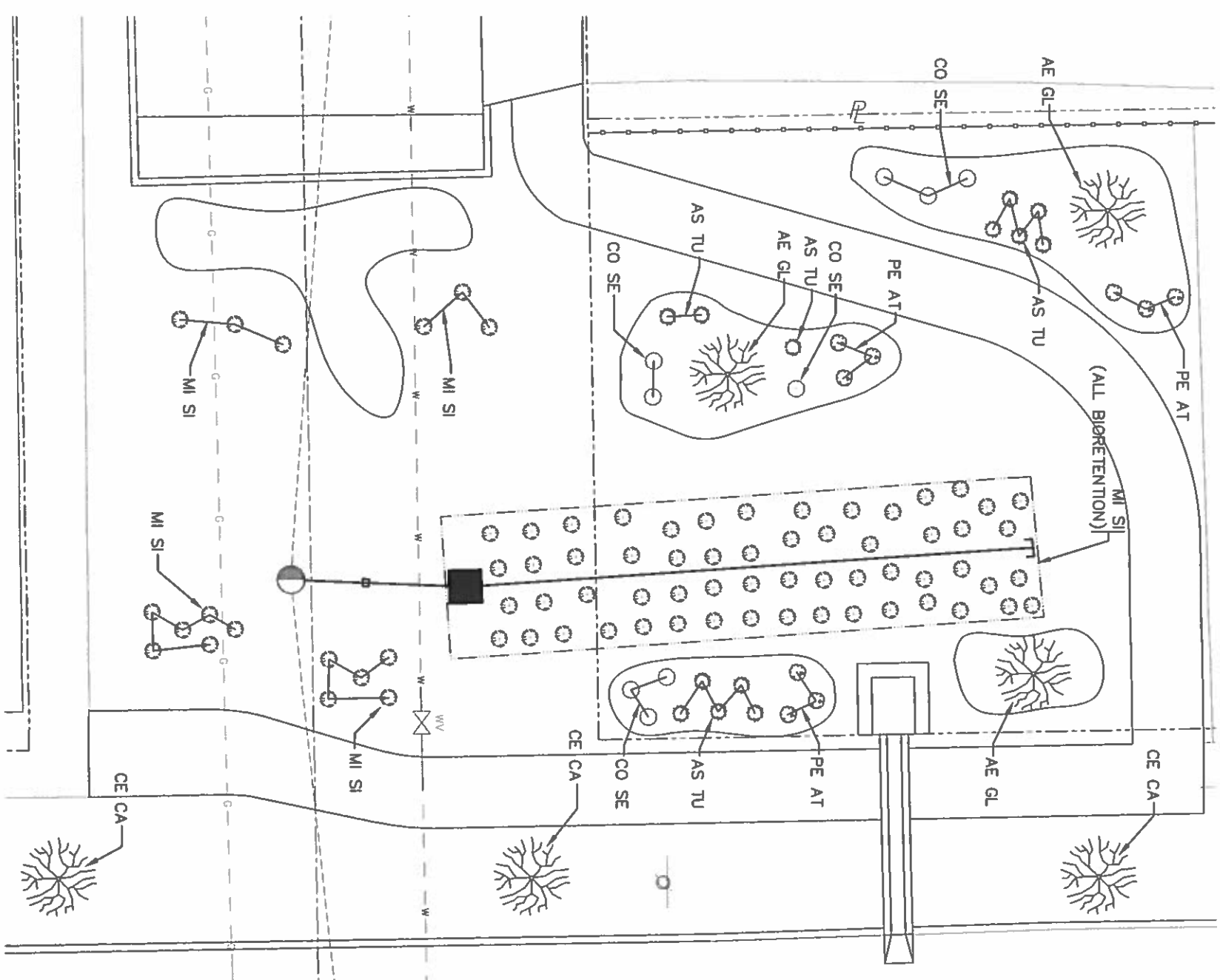
BM #15, METAL PIN LOCATED IN WEST SIDE OF MONUMENT POLE ON EAST SIDE OF E. 35TH STREET
 ELEV. = 898.83



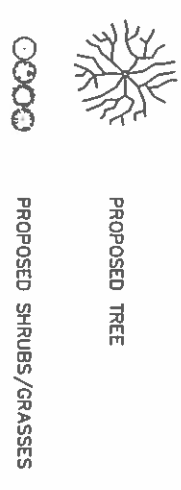
SHEET 7 of 13	DATE August 27, 2015	PROJ NUMBER 3008-15-0020	SNO SPB	PROJ MGR DBH	CAD 184	COUNTY CUYAHOGA	CITY/VILLAGE/TOWNSHIP NEWBURGH HEIGHTS	SCALE 1" = 4'	HORIZ DATUM V	VERT DATUM M	REVISIONS	REGISTERED PROFESSIONAL ENGINEER SCOTT R. BICKLEY, P.E. Ohio Professional Engineer #71470	ARCHITECT ENGINEER FIRM OHM 6810 W. SNOWMADE RD., STE. A BRECKENRIDGE, OHIO 43111 614.320.5724
	VILLAGE of NEWBURGH HEIGHTS BROW AVENUE GREEN INFRASTRUCTURE PROJECT SEDIMENT CONTROL PLAN											OHMARCHITECTS.COM	

PLANTING NOTES

1. STAKE ALL BED LINES AND TREE LOCATIONS FOR THE LANDSCAPE ARCHITECT'S REVIEW PRIOR TO INSTALLATION. ALL PLANTING PROCEDURES ARE SUBJECT TO THE REVIEW OF THE LANDSCAPE ARCHITECT AND THE CONTRACTOR SHALL CORRECT ANY DEFICIENCIES FOUND AT NO ADDITIONAL COST TO THE OWNER.
2. SECURE PLANT MATERIAL AS SPECIFIED ON PLANS. IN THE EVENT THAT PLANT MATERIALS SPECIFIED ARE NOT AVAILABLE, CONTACT LANDSCAPE ARCHITECT FOR APPROVED SUBSTITUTIONS. NO SUBSTITUTIONS FOR PLANT MATERIALS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT.
3. VERIFY THAT ALL PLANTING PRODUCTS, PLANT MATERIAL, AND PLANT QUANTITIES DELIVERED TO THE SITE MATCH WHAT IS INDICATED ON THE PLANS AND SPECIFICATIONS.
4. PROTECT ALL PLANT MATERIAL DURING DELIVERY TO PREVENT DAMAGE TO ROOT BALLS, TRUNKS, BRANCHES AND THE DESIGNATION OF LEAVES. PROTECT ALL PLANT MATERIAL DURING STORAGE WITH SHADY-TAN PROTECTORS AND HEALTH ENHANCING TRANSPORT MEDIA. PROTECTORS AND HEALTH ENHANCING MEDIA STORED ON SITE SHOULD INCLUDE ALL TREES WITH WIND STRAPS AND CHAINS OR CABLES WILL BE ALLOWED. REMOVE UNACCEPTABLE PLANT MATERIAL IMMEDIATELY FROM THE SITE.
5. ALL PLANT MATERIAL SHALL BE NURSERY GROWN, WELL FORMED, TRUE TO SPECIES, HARDENED OFF WITH VIGOROUS ROOT SYSTEMS, FULL CROWN AND CANOPES, AND FREE FROM DISEASE, PESTS AND INSECTS, AND DEFECTS SUCH AS KNOTS, SUN SCALD, WINDBURN, LEAF DIS-COLORATION, IRRREGULAR BRANCHING OR INJURIES.
6. ALL ROOT BALLS SHALL CONFORM TO THE SIZE STANDARDS SET FORTH IN AMERICAN STANDARDS FOR NURSERY STOCK.
7. ALL PLANT MATERIAL DELIVERED TO THE SITE IS SUBJECT TO THE REVIEW OF THE LANDSCAPE ARCHITECT BEFORE, DURING AND AFTER INSTALLATION.
8. PROVIDE PLANT SAMPLES OR PHOTOGRAPHS OF EACH PLANT SPECIFIED TO THE LANDSCAPE ARCHITECT FOR COMPLIANCE REVIEW PRIOR TO INSTALLATION.
9. TEST FILL ALL TREE AND PLANTING PITS WITH WATER PRIOR TO PLANTING. TO ASSURE PROPER SOIL PERCOLATION PITS SHALL BE TO A DEPTH OF 18" FOR 3" CAL. PLANTS TO OCCUR AND/OR BACKFILLED WITH SUITABLE DRAINAGE GRAVEL AND ALLOWANCES SHALL BE MADE FOR PLANT MATERIAL LOSS DUE TO IMPROPER DRAINAGE. CONTRACTOR SHALL REPLACE LOST PLANT MATERIAL WITH SAME SIZE AND SPECIES AT NO ADDITIONAL COST TO OWNER.
10. ALL PLANT MATERIALS, INCLUDING RELOCATED PLANT MATERIAL, SHALL BE PLANTED IN A PROFESSIONAL MANNER TYPICAL TO THE INDUSTRY STANDARDS OF THE AREA TO ASSURE COMPLETE SURVIVABILITY OF ALL INSTALLED PLANT MATERIALS AS WELL AS TO PROVIDE AN AESTHETICALLY APPROVED PROJECT. CONTRACTOR SHALL REFER TO THE PLANTING DETAILS FOR MINIMUM SIZE AND WIDTH OF PLANTING PITS AND BEDS, GUNNING AND STAKING, MULCHING, AND OTHER PLANTING REQUIREMENTS.
11. NO PLANTS SHALL BE PLANTED WITH IN A 2'-0" RADIUS (CLEARANCE ZONE) AROUND ALL ATRIUM DRAINS LOCATED IN LANDSCAPE BEDS. CONTRACTOR SHALL MULCH AREA AROUND ALL ATRIUM DRAINS LOCATED IN LANDSCAPE BEDS. REFER TO ENGINEERING DRAWINGS FOR ALL DRAIN LOCATIONS.
12. LAWN AREAS TO PROVIDE A SMOOTH AND CONTINUOUS GRADE.
13. PLANTING ISLANDS SHALL HAVE A MINIMUM OF 3" DEPTH.
14. ALL PLANTING AREAS SHALL BE WEED FREE PRIOR TO PLANTING INSTALLATION.
15. REMOVE ALL PLANTING AND LANDSCAPE DEBRIS FROM THE PROJECT SITE AND SWEEP AND WASH CLEAN ALL PAVED AND FINISHED SURFACES AFFECTED BY THE LANDSCAPE INSTALLATION.
16. SEE SPECIFICATIONS FOR SEEDING INFORMATION.
17. SEE SHEET 12 FOR ALL LANDSCAPE PLAN DETAILS.
18. NO PERMANENT STRUCTURES, INCLUDING TREES, SHALL BE BUILT/PLANTED WITHIN 10' ON EITHER SIDE OF THE EXISTING COMBINATION SEWER LINE.
19. NO PERMANENT STRUCTURES, INCLUDING TREES, SHALL BE BUILT/PLANTED WITHIN 5' ON EITHER SIDE OF THE EXISTING WATERLINE OR GAS LINE.



PLANTING LEGEND:



PLANT LIST: TREES

CODE	COMMON NAME	LATIN NAME	SIZE	COND.	SPACING	QUANTITY
AE GL	RED SUNSET RED MAPLE	ACER RUBRUM 'TRANSRED'	3" CAL.	B & B	PER PLAN	3
CE CA	EASTERN REDBUD	CERCIS CANADENSIS	8' HT.	B & B	PER PLAN	3

PLANT LIST: SHRUBS

CODE	COMMON NAME	LATIN NAME	SIZE	COND.	SPACING	QUANTITY
CO SE	CARDINAL RED TWIG DOGWOOD	CORNUS SERICEA 'CARDINAL'	5 GAL.	CONT.	PER PLAN	9
PE AT	RUSSIAN SAGE	PEROVSKIA ATRIPLOFOLIA	5 GAL.	CONT.	PER PLAN	9

PLANT LIST: PERENNIALS

CODE	COMMON NAME	LATIN NAME	SIZE	COND.	SPACING	QUANTITY
AS TU	BUTTERFLY WEED	ASCLEPIAS TUBEROSA	1 GAL.	CONT.	PER PLAN	13
MI SI	GRACILINUS MAIDEN GRASS	MISCANTHUS SINENSIS	3 GAL.	CONT.	PER PLAN	80

PERMANENT SEEDING REQUIREMENTS (PER. 0001 659)

SEEDS	RATE
KENTUCKY BLUEGRASS	3 LBS / 1000 SF
CREeping RED FESCUE	3 LBS / 1000 SF
ANNUAL RyEGrASS	2 LBS / 1000 SF
PERENNIAL RyEGrASS	2 LBS / 1000 SF

NOTE:

ALL DISTURBED AREAS OUTSIDE OF THE PROPOSED LANDSCAPE ISLANDS & BIOSWALE SHALL BE SEEDED WITH THE PERMANENT SEEDING LAWN MIXTURE NOTED ABOVE (PER 0001 659)

THE PROPOSED LOCAL DEPRESSION / TURF SACRIFICE AREA SHALL ALSO BE SEEDED WITH THE PERMANENT SEEDING LAWN MIXTURE NOTED ABOVE (PER 0001 659)

THE PROPOSED BIOSWALE WILL CONSIST OF ONLY "CODE MI SI" PLANTINGS

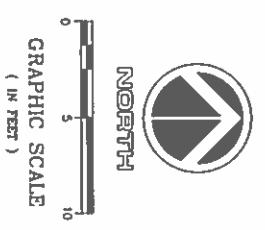
ALL LANDSCAPE ISLANDS SHALL BE EDGED PER TYPICAL EDGING DETAIL SEEN ON SH. 12

ALL LANDSCAPE ISLANDS SHALL BE FURNISHED WITH 3" DEEP WOOD FIBER MULCH PER 0001 ITEM 659.15

BIOSWALE SHALL BE FURNISHED WITH 3" DEEP COMPOST MULCH PER 0001 ITEM 659.16.

APPLY COMMERCIAL FERTILIZER TO ALL PROPOSED AREAS OF VEGETATION PER 0001 659.04

APPLY WATER TO ALL PLANTED VEGETATION PER 0001 659.17



GRAPHIC SCALE
(IN FEET)



OHM

AGENCY PROJECT NUMBER
6830 W. SHOWNALE RD. STE. A
BRECKENRIDGE, OHIO 44141
380.657.2145
OHM40509055.COM

STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER
SCOTT R. BUCKLEY
E-71470
Scott R. Buckley, P.E.
Ohio Professional Engineer
#77470

REVISIONS

NO.	DATE	DESCRIPTION

SHEET: **8 of 13**

DATE: April 2015
PROJECT NUMBER: 2008-15-0220
ENCL: 508
PROJECT: VILLAGE of NEWBURGH HEIGHTS
COUNTY: CUYAHOGA
CITY/VILLAGE/TOWNSHIP: NEWBURGH HEIGHTS
SCALE: 1" = 4'-0"

**VILLAGE of NEWBURGH HEIGHTS
BROW AVENUE GREEN INFRASTRUCTURE PROJECT
LANDSCAPE PLAN**

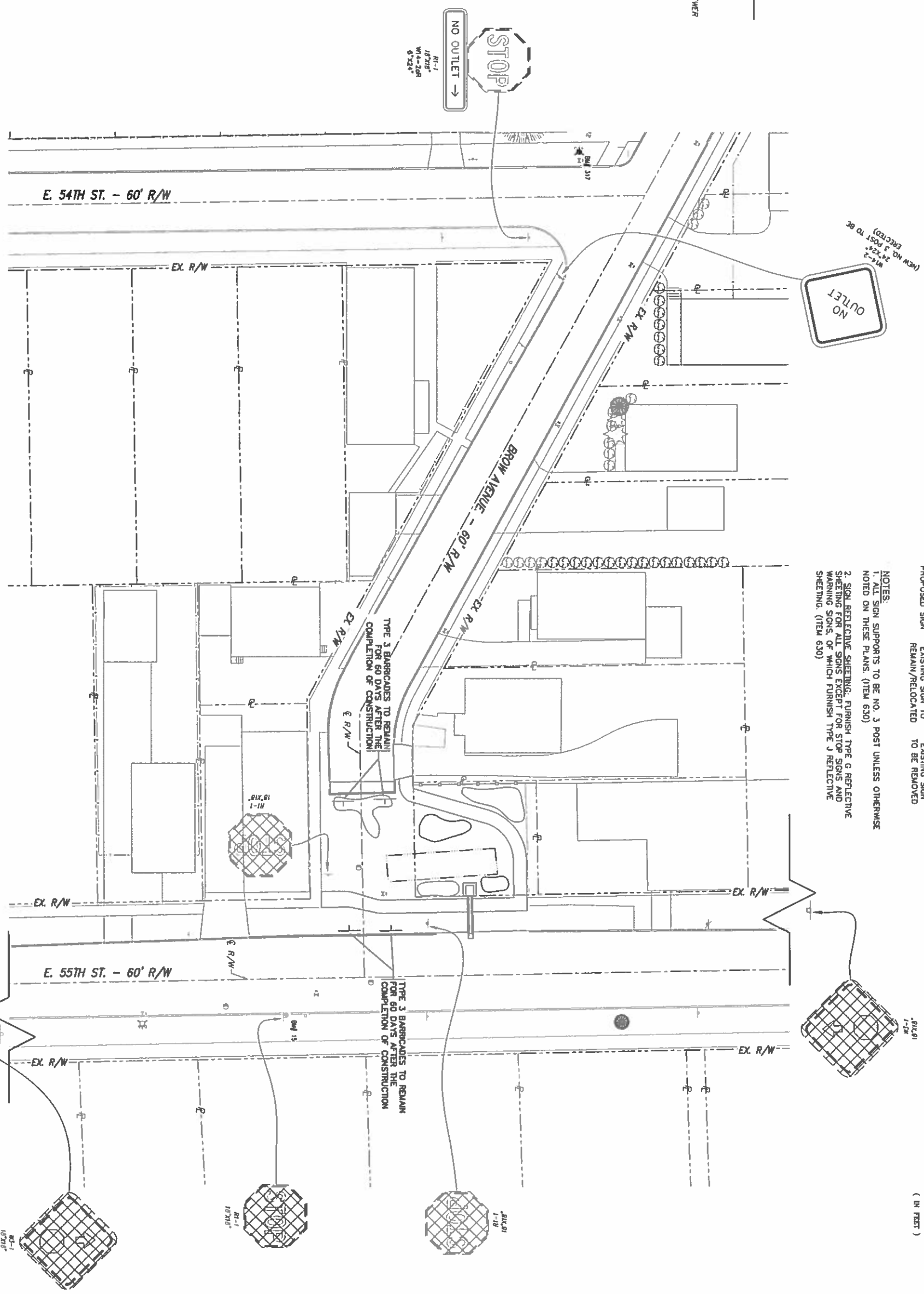
OGPUPS
Ohio Utilities Protection SERVICE
Call us for the Best
800-362-2764 or 8-1-1
www.ogpups.org

Copyright 2015 OHM. ALL DRAWINGS AND WRITTEN MATERIALS APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF OHM AND THE SAME MAY NOT BE DUPLICATED, DISTRIBUTED OR DISCLOSED WITHOUT PRIOR WRITTEN CONSENT OF OHM.

Ohio Protection Service
 Civil Engineering
 800-362-2764 or 8-1-1
 www.oups.org
OGUPPS
 Ohio Green Utilities Professional Project System
 800-925-0988 or 8-1-1
 www.ogupps.org

EXISTING LEGEND

	EX. DRAINAGE STRUCTURE
	EX. MONUMENT BOX
	EX. UTILITY POLE
	EX. STORM/COMBINATION SEWER
	EX. WATERLINE
	EX. GAS LINE
	EX. SANITARY SEWER
	EX. WATER METER
	EX. COMBINATION MANHOLE
	EX. WATER VALVE
	EX. SIGN
	EX. GAS VALVE
	EX. FENCE
	EX. 1 FOOT CONTOUR
	EX. 5 FOOT CONTOUR
	EX. TREELINE

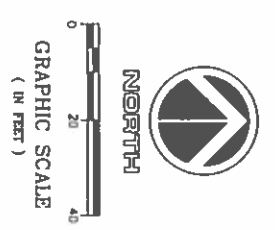


PROPOSED LEGEND

	PROPOSED SIGN
	EXISTING SIGN TO REMAIN/RELOCATED
	EXISTING SIGN TO BE REMOVED

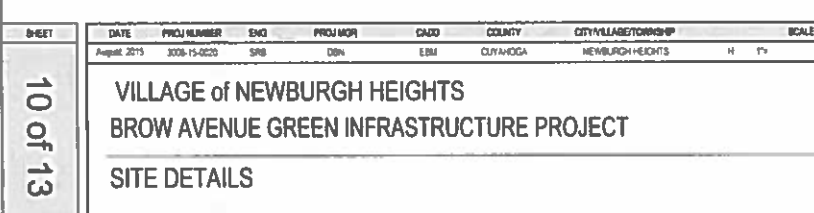
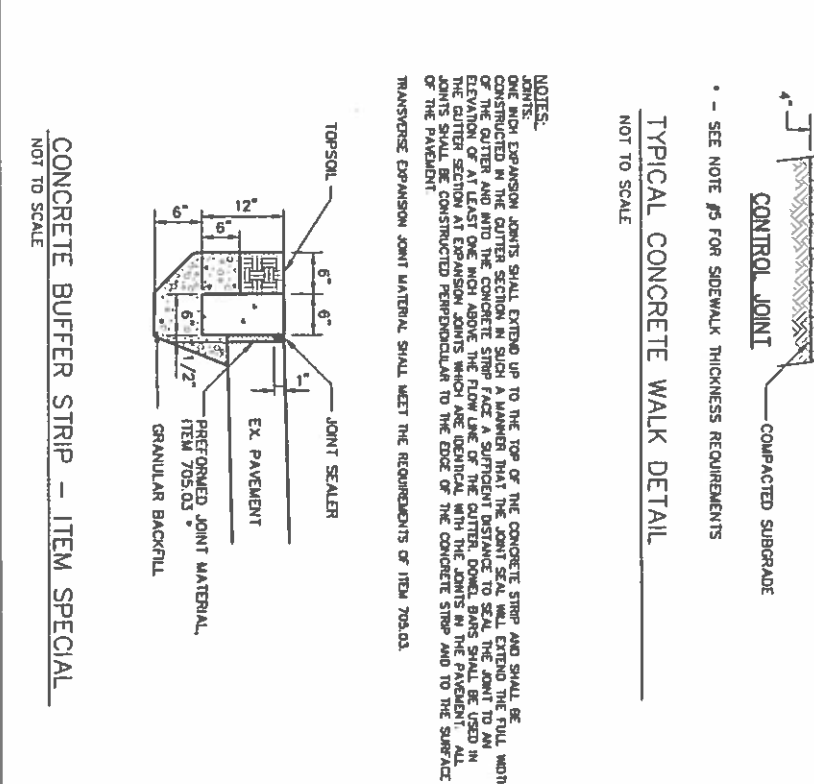
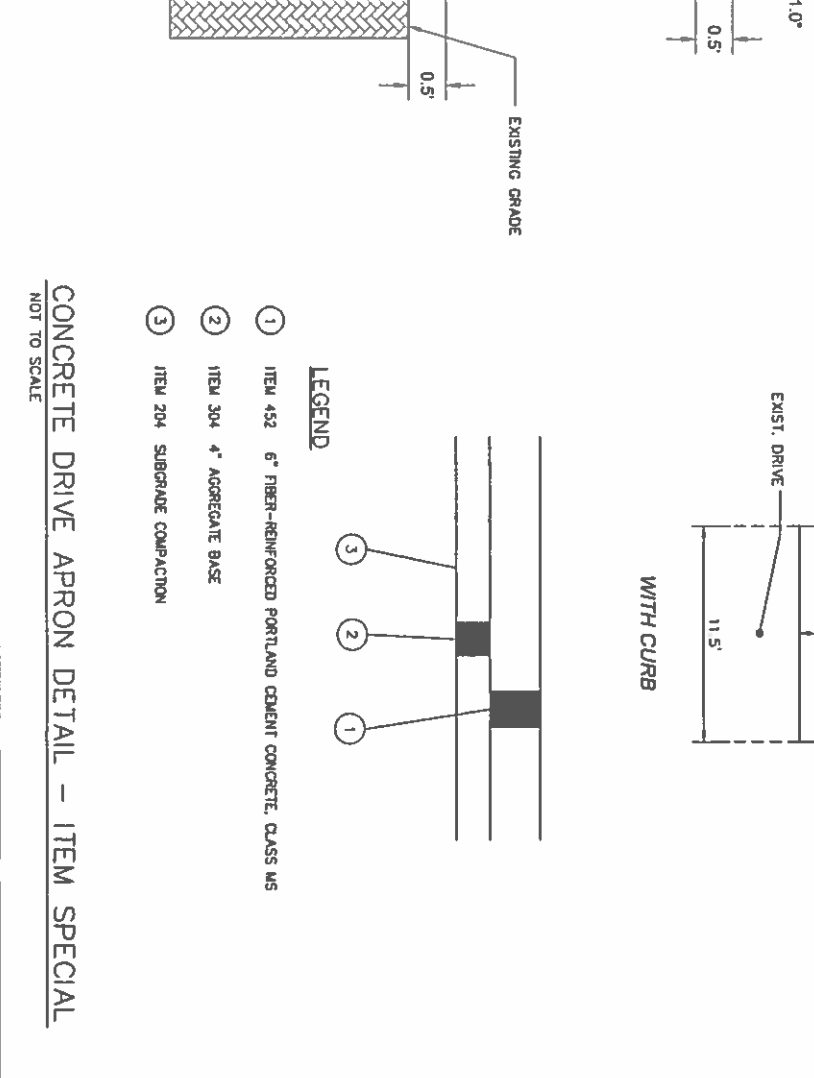
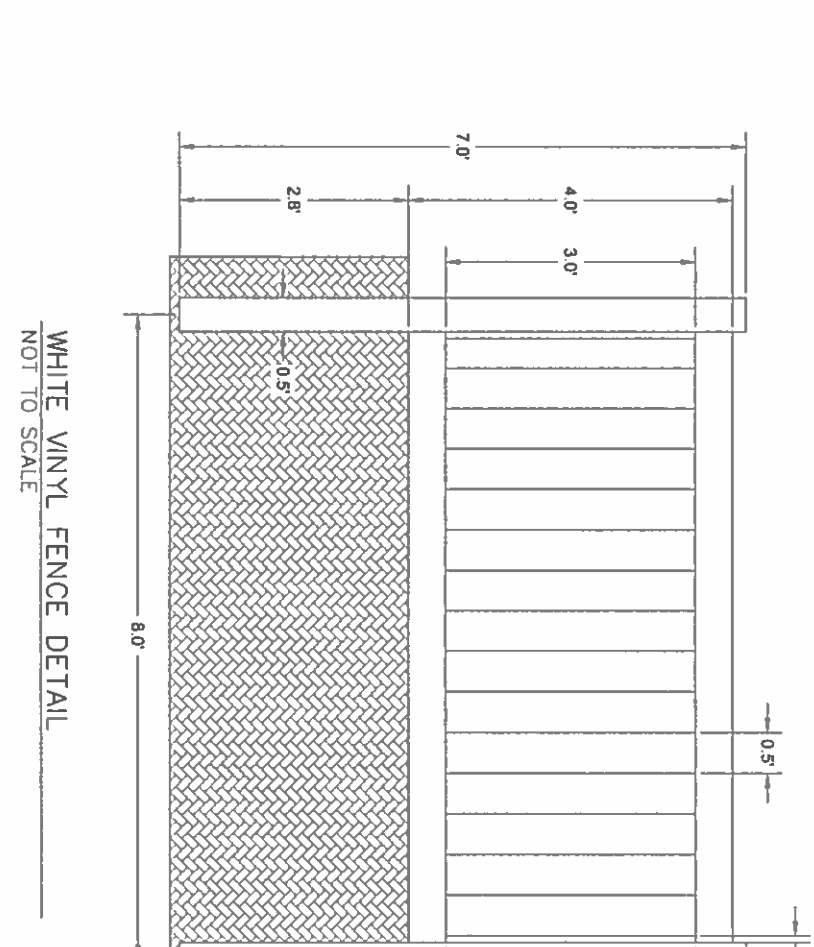
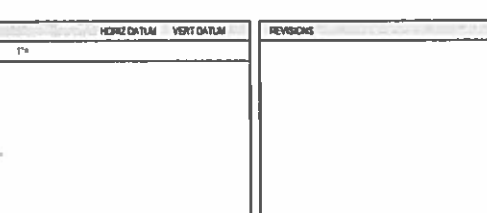
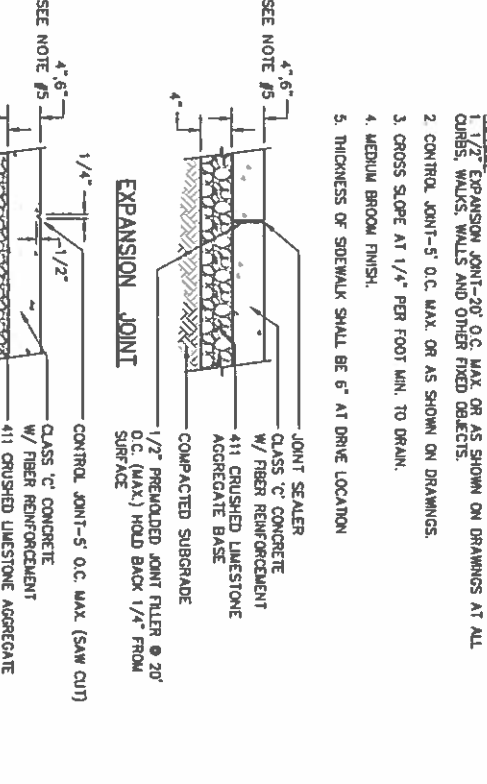
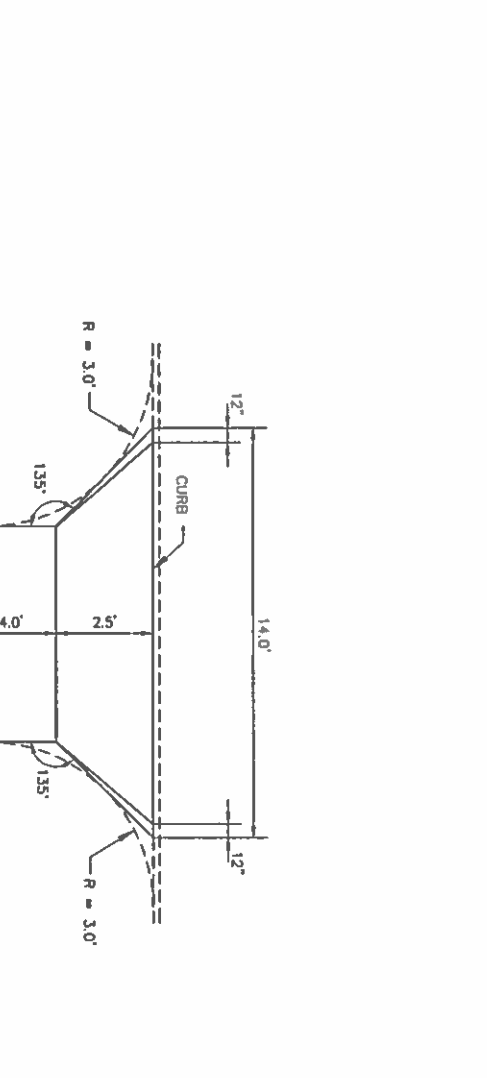
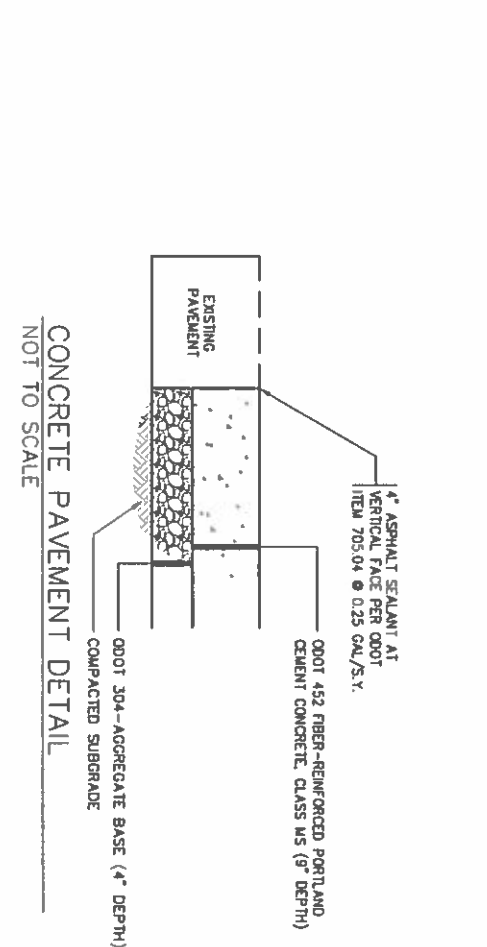
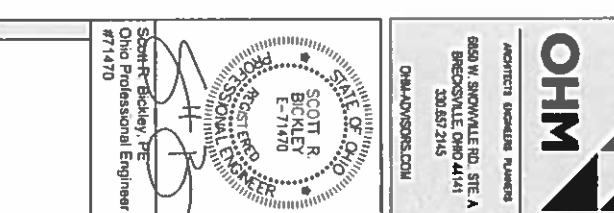
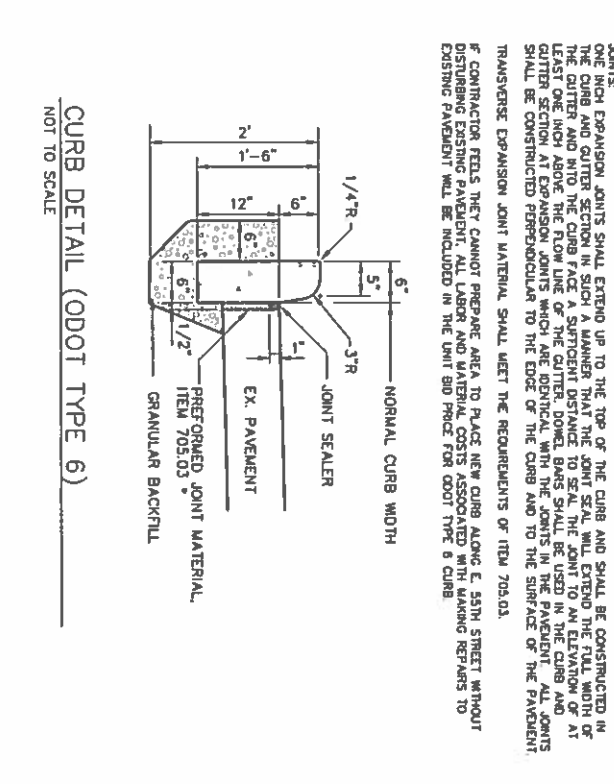
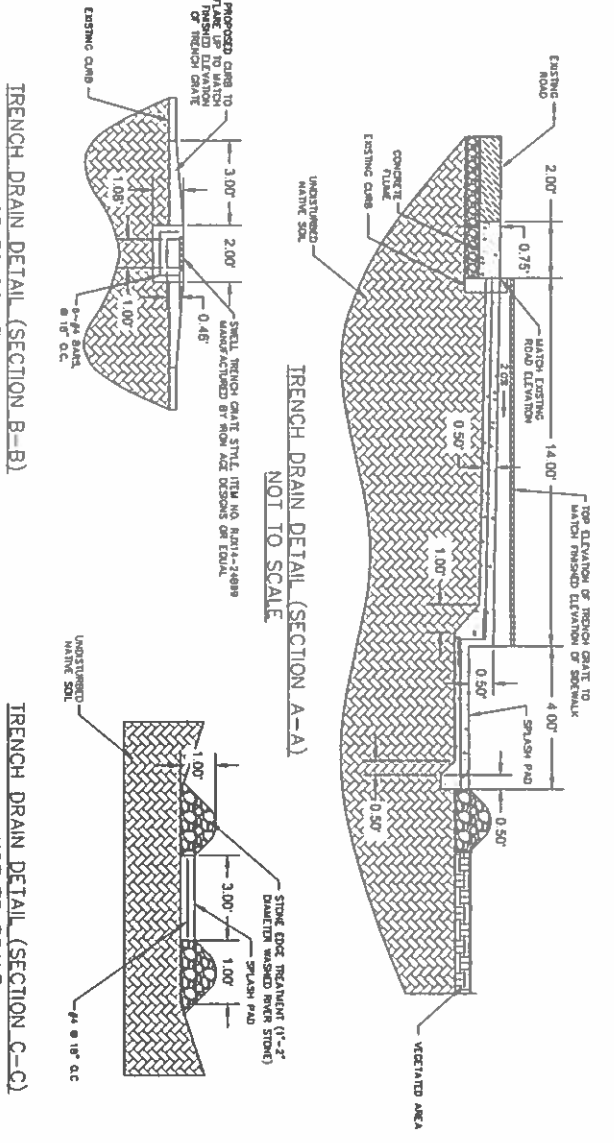
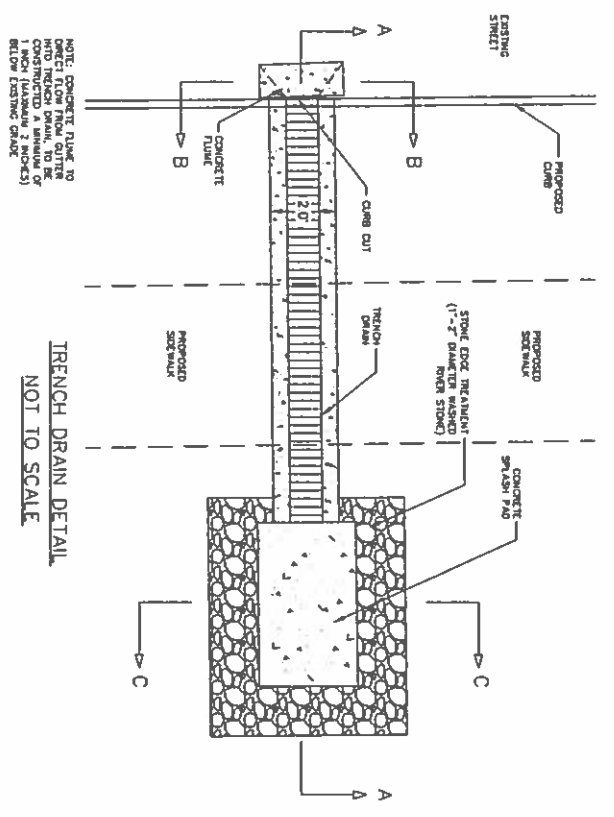
NOTES:
 1. ALL SIGN SUPPORTS TO BE NO. 3 POST UNLESS OTHERWISE NOTED ON THESE PLANS. (ITEM 630)
 2. SIGN REFLECTIVE SHEETING: FURNISH TYPE C REFLECTIVE SHEETING FOR ALL SIGNS EXCEPT FOR STOP SIGNS AND WARNING SIGNS, OF WHICH FURNISH TYPE J REFLECTIVE SHEETING. (ITEM 630)

BENCHMARK No. 15
 BM #15 METAL PIN LOCATED IN WEST SIDE OF POWER POLE ON EAST SIDE OF E. 55TH STREET
 ELEV. = 998.83



SHEET 9 of 13	DATE August 2015	PROJ NUMBER 2008-15-0220	ENGR SNB	PROJ MGR DBH	CADD EBM	COUNTY Cuyahoga	CITY/VILLAGE/TOWNSHIP NEWBURGH HEIGHTS	SCALE H 1" = 40'	HORIZ DATUM V	VERT DATUM M	REVISIONS	OHM PROJECTS ENGINEERING & SURVEYING 850 W. BIRCHLEIGH RD. STE. A BIRCHLEIGH CIRCLE #411 CLEVELAND, OH 44115 330.857.2143 OHM-ADVISORS.COM
	VILLAGE of NEWBURGH HEIGHTS BROW AVENUE GREEN INFRASTRUCTURE PROJECT TRAFFIC CONTROL PLAN											

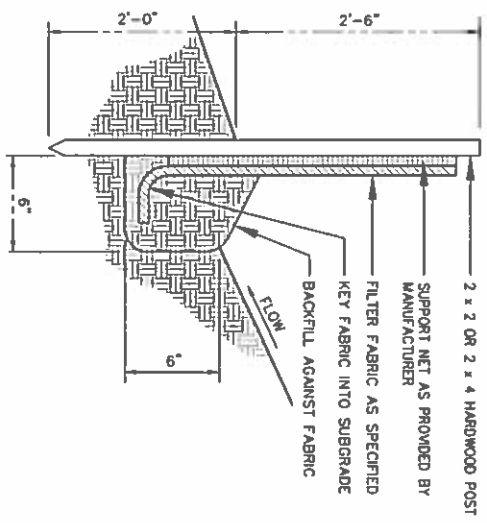
Copyright 2015 OHM All Drawings and Written Materials Appearing Herein Constitute the Original and Unpublished Work of OHM and the Same May Not be Duplicated, Distributed or Disclosed Without Prior Written Consent of OHM



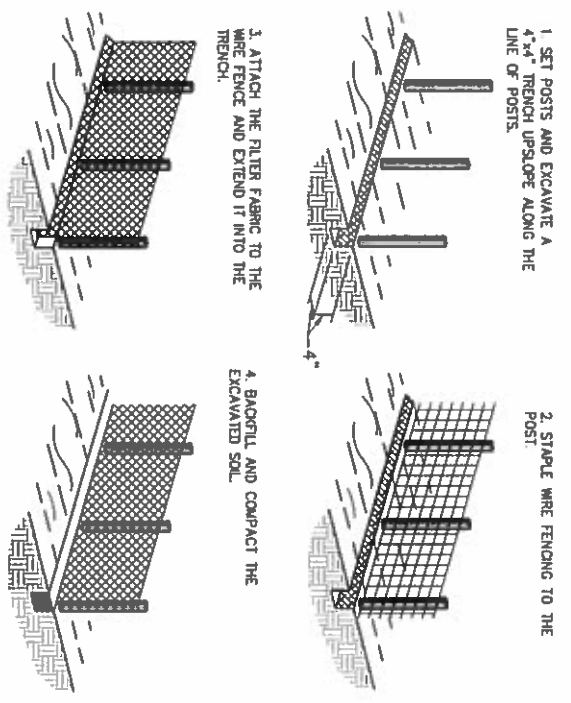
NOTES:
 JOINTS:
 ONE EACH EXPANSION JOINT SHALL EXTEND UP TO THE TOP OF THE CURB AND SHALL BE CONSTRUCTED IN THE CURB AND GUTTER SECTION IN SUCH A MANNER THAT THE JOINT SEAL WILL EXTEND THE FULL WIDTH OF THE CURB AND GUTTER SECTION AND THE JOINT SEAL SHALL BE CONSTRUCTED IN THE CURB AND GUTTER SECTION AT THE GUTTER AND INTO THE CONCRETE STRIP. A SUFFICIENT DISTANCE TO SEAL THE JOINT TO AND IN THE GUTTER SECTION AT EXPANSION JOINTS WHICH ARE IDENTICAL WITH THE JOINTS IN THE PAVEMENT. ALL JOINTS SHALL BE CONSTRUCTED PERPENDICULAR TO THE EDGE OF THE CURB AND TO THE SURFACE OF THE PAVEMENT.
 TRANSVERSE EXPANSION JOINT MATERIAL SHALL MEET THE REQUIREMENTS OF ITEM 705.03.
 IF CONTRACTION FEELS THEY CANNOT PREPARE AREA TO PLACE NEW CURB ALONG E. 55TH STREET WITHOUT DISTURBING EXISTING PAVEMENT, ALL LABOR AND MATERIAL COSTS ASSOCIATED WITH MAKING REPAIRS TO EXISTING PAVEMENT WILL BE INCLUDED IN THE UNIT BID PRICE FOR ODOT TYPE 6 CURB.

- NOTES:**
1. EXPANSION JOINT-20" O.C. MAX OR AS SHOWN ON DRAWINGS AT ALL CURBS, WALKS AND OTHER FIXED OBJECTS.
 2. CONTROL JOINT-5' O.C. MAX. OR AS SHOWN ON DRAWINGS.
 3. CROSS SLOPE AT 1/4" PER FOOT MIN. TO DRAIN.
 4. MEDIUM BROOM FINISH.
 5. THICKNESS OF SIDEWALK SHALL BE 6" AT DRIVE LOCATION.

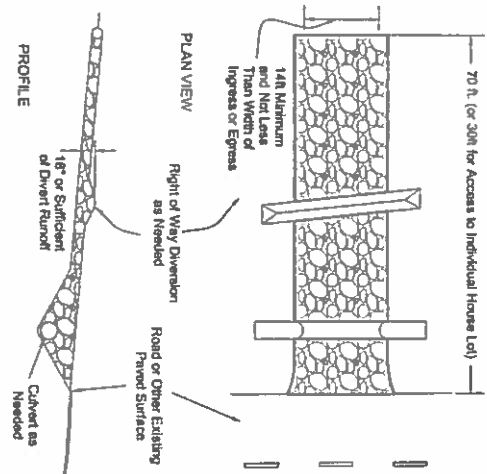
• SEE NOTE #5 FOR SIDEWALK THICKNESS REQUIREMENTS



TYPICAL SILT FENCE DETAIL
NOT TO SCALE

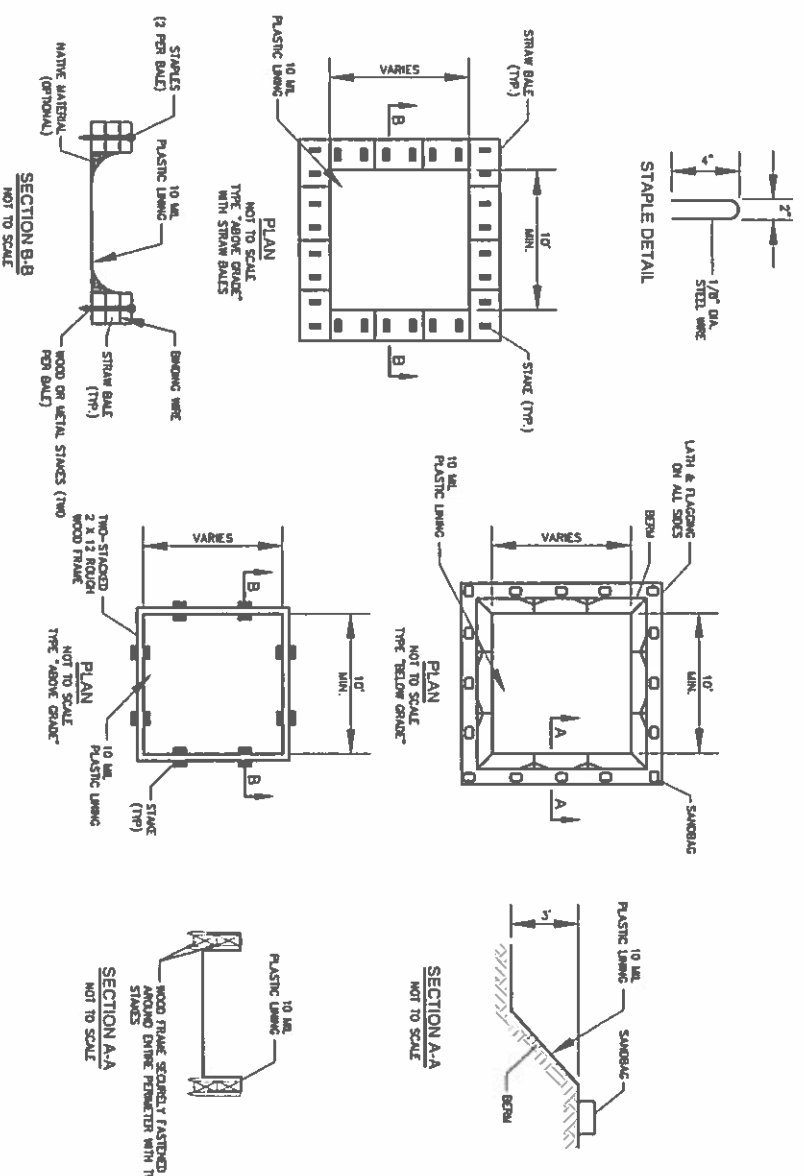


SILT FENCE INSTALLATION DETAIL
NOT TO SCALE



CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

- NOTES**
1. Slope 2:1 (H:V) for all slopes and be used in all situations where the ground is not firm.
 2. All slopes shall be constructed per the Ohio Department of Transportation (ODOT) Standard Specifications for Road and Bridge Construction, Section 205.01, unless otherwise noted.
 3. The minimum slope shall be 2:1 (H:V) for all slopes.
 4. The maximum slope shall be 4:1 (H:V) for all slopes.
 5. The maximum height of any slope shall be 14 feet.
 6. The maximum width of any slope shall be 75 feet.
 7. The maximum length of any slope shall be 100 feet.
 8. The maximum area of any slope shall be 10,000 square feet.
 9. The maximum volume of any slope shall be 10,000 cubic feet.
 10. The maximum weight of any slope shall be 10,000 pounds.
 11. The maximum pressure of any slope shall be 10,000 pounds per square foot.



CONCRETE WASHOUT PIT DETAIL
NOT TO SCALE