

Drawing name: K:\GIS\DEV\168193001_Torburn_Partners - Arlington Heights\2_Design\CADD\PlanSheets\Final_Engineering\C0.0_TITLE_SHEET.dwg C0.0 May 14, 2015 3:34pm by: sullivan.hornas
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

FINAL ENGINEERING PLANS

NORTHWEST CROSSINGS

1421 W. SHURE DRIVE
ARLINGTON HEIGHTS, IL 60004



UTILITY AND GOVERNING AGENCY CONTACTS

ENGINEERING DEPARTMENT
VILLAGE OF ARLINGTON HEIGHTS
33 S. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, IL 60005
TEL: (847) 368-5250
CONTACT: MIKE PAGONES

STORM SEWER SERVICE
METROPOLITAN WATER RECLAMATION DISTRICT
100 E. ERIE STREET
CHICAGO, IL 60611
TEL: (312) 751-3250

WATER SERVICE
VILLAGE OF ARLINGTON HEIGHTS
33 S. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, IL 60005
TEL: (847) 368-5800

POWER
COMED
TEL: (630) 705-7439

NATURAL GAS COMPANY
NICOR
615 EASTERN AVENUE
BELLWOOD, IL 60104
TEL: (708) 544-5707 (X. 292)
CONTACT: DARREN EDMUNDSON
YVONNE HARRIS

TELEPHONE
AT&T
TEL: (800) 244-4444

PROJECT TEAM

DEVELOPER
TORBURN PARTNERS
1033 SKOKIE BOULEVARD, SUITE 480
NORTHBROOK, IL 60062
TEL: (847) 562-1616
EMAIL: AKELDERMANS@TORBURN.COM
CONTACT: ADAM KELDERMANS

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE RD, SUITE 350
LISLE, IL 60532
TEL: (630) 487-5550
EMAIL: LESLEY.NETZER@KIMLEY-HORN.COM
CONTACT: LESLEY NETZER, PE

SURVEYOR
COMPASS SURVEYING, LTD
2631 GINGER WOODS PARKWAY, SUITE 100
AURORA, IL 60502
TEL: (630) 820-9100
EMAIL: SKREBS@CLSURVEYING.COM
CONTACT: SCOTT KREBS

LANDSCAPE ARCHITECT
KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE RD, SUITE 350
LISLE, IL 60532
TEL: (630) 487-5550
EMAIL: KEITH.DEMCHINSKI@KIMLEY-HORN.COM
CONTACT: KEITH DEMCHINSKI, PLA, LEED AP

BENCHMARKS

VILLAGE OF ARLINGTON HEIGHTS MONUMENT #8
(NAVD 1988 DATUM)

1" BRASS DISK ON THE EAST SIDE OF CONCRETE BASE FOR A LIGHT POLE
APPROXIMATELY 42.5 FEET SOUTH OF THE CENTERLINE OF CELLULAR DRIVE AND 25'
EAST OF THE CENTERLINE OF WILKE ROAD

ELEVATION=723.37

SITE BENCHMARKS:
(LOCATIONS SHOWN ON SURVEY)

SBM #1: SOUTHWEST BONNET BOLT ON FIRST FIRE HYDRANT SOUTH OF CELLULAR DRIVE
NEAR SOUTHEAST ENTRANCE OF SITE ON WEST SIDE OF KENNICOTT AVENUE

ELEVATION=732.41

SBM #2: ARROW BOLT ON FIRE HYDRANT AT NORTHWEST CORNER OF BUILDING #1455
SOUTH OF SITE AT APPROXIMATELY MIDPOINT OF SOUTH LOT LINE OF SITE

ELEVATION=738.01

SBM #3: SOUTHWEST BONNET BOLT ON FIRST FIRE HYDRANT SOUTH OF SHURE DRIVE ON
WEST SIDE OF KENNICOTT AVENUE

ELEVATION=737.10 **SBM #4:** NORTHEAST BONNET BOLT ON FIRST FIRE HYDRANT SOUTH OF
CELLULAR DRIVE NEAR SOUTHWEST ENTRANCE OF SIDE

ELEVATION=724.38

SBM #5: NORTHWEST BONNET BOLT ON FIRST FIRE HYDRANT EAST OF WILKE ROAD AT
NORTHWEST CORNER OF SITE ON NORTH SIDE OF SHURE DRIVE

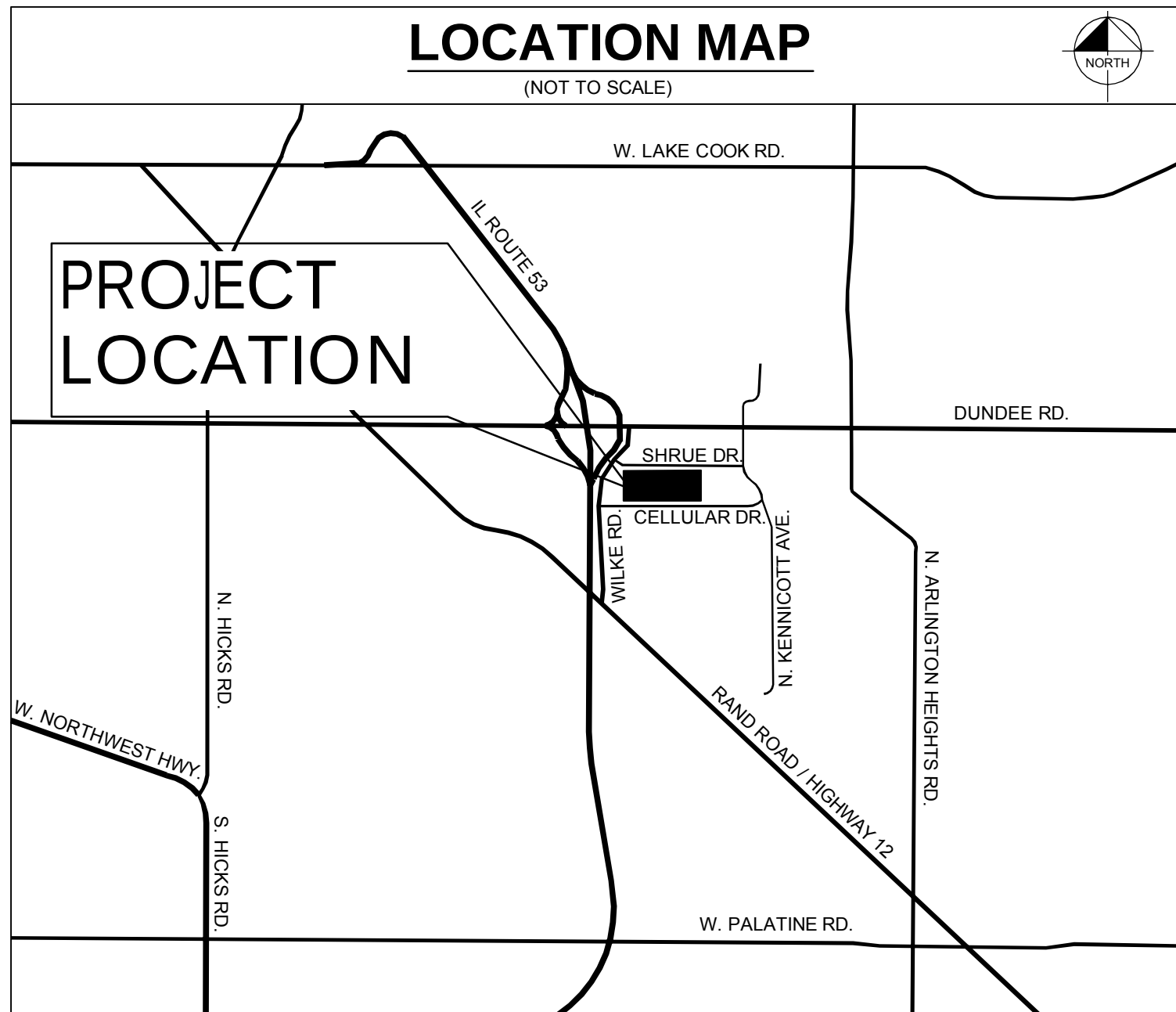
ELEVATION=725.95

SBM #6: NORTHEAST BONNET BOLT ON FOURTH FIRE HYDRANT EAST OF WILKE ROAD
ON NORTH SIDE OF SHURE DRIVE

ELEVATION=740.22

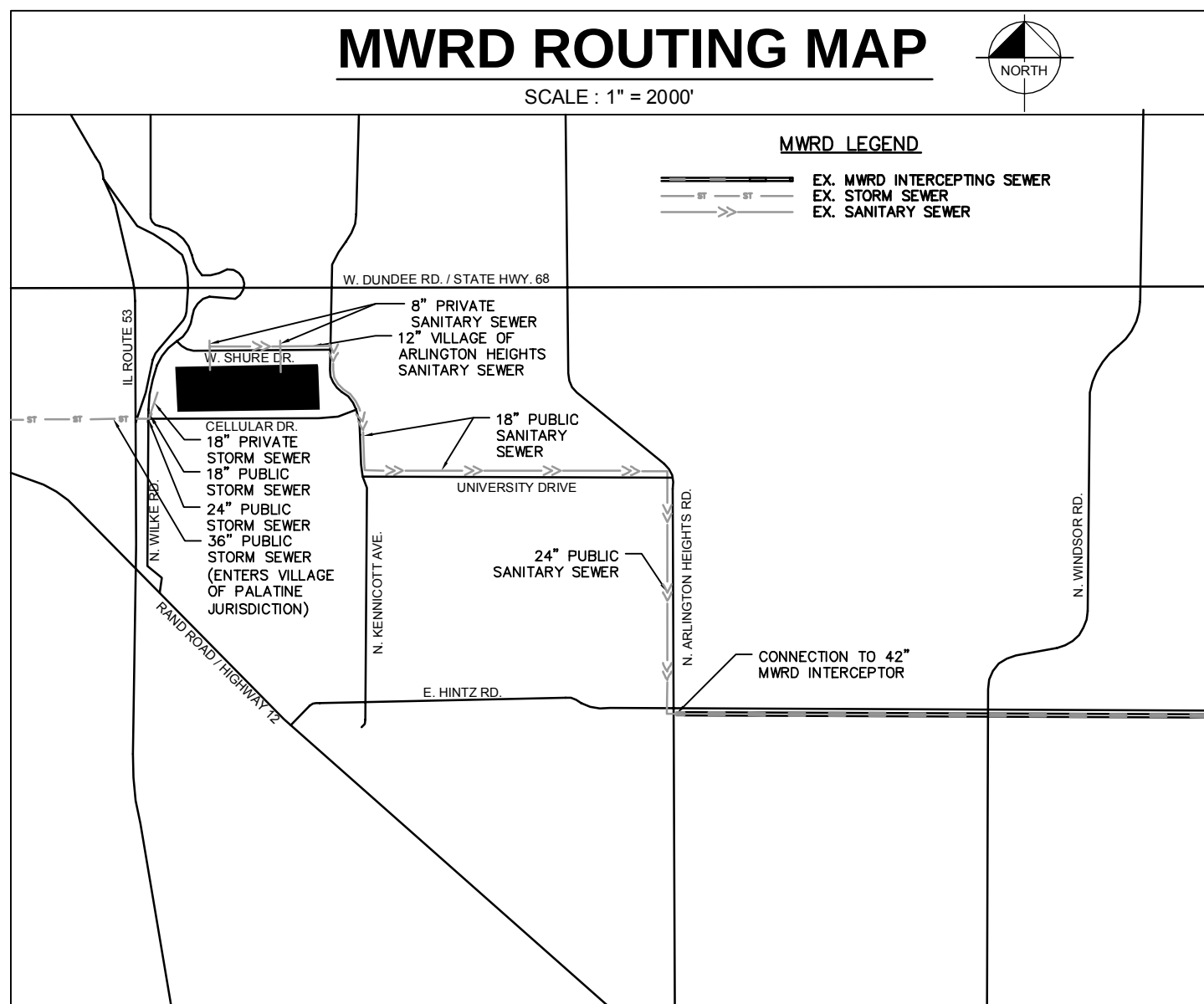
LOCATION MAP

(NOT TO SCALE)



MWRD ROUTING MAP

SCALE: 1" = 2000'



LEGAL DESCRIPTION

THAT PART OF LOT 1 IN ARLINGTON INDUSTRIAL & RESEARCH CENTER – UNIT NUMBER 6, BEING A
SUBDIVISION OF SECTION 7, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THRID PRINCIPAL
MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED ON AUGUST 22, 1972 AS DOCUMENT
NUMBER 22024211, IN THE OFFICE OF RECORDER OF DEEDS OF COOK COUNTY, ILLINOIS, SAID
PARTS LYING NORTH AND WEST OF A LINE DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID LOT 1; THENCE NORTH 11 DEGREES 17 MINUTES
16 SECONDS EAST, 36.44 FEET; THENCE NORTH 89 DEGREES 53 MINUTES 08 SECONDS EAST,
2145.54 FEET; THENCE NORTH 00 DEGREES 04 MINUTES 09 SECONDS EAST 372.77 FEET; THENCE
NORTH 89 DEGREES 53 MINUTES 30 SECONDS EAST, 72.20 FEET TO THE EAST LINE OF LOT 1
AFORSAID, IN COOK COUNTY, ILLINOIS.

INDEX OF DRAWINGS

Sheet Number	Sheet Title
C0.0	TITLE SHEET
C1.0	GENERAL NOTES
C2.1	DEMOLITION PLAN - EAST
C2.2	DEMOLITION PLAN - WEST
C3.0	OVERALL SITE PLAN
C3.1	SITE PLAN - EAST
C3.2	SITE PLAN - WEST
C4.1	EROSION CONTROL PLAN - EAST
C4.2	EROSION CONTROL PLAN - WEST
C4.3	EROSION CONTROL NOTES & DETAILS
C5.1	GRADING PLAN - EAST
C5.2	GRADING PLAN - WEST
C5.3	GRADING PLAN DETAILS
C5.4	MWRD PLAN
C6.1	UTILITY PLAN - EAST
C6.2	UTILITY PLAN - WEST
C7.0	CONSTRUCTION DETAILS
C7.1	CONSTRUCTION DETAILS
P1.0	PHOTOMETRIC PLAN
L1.1	TREE PRESERVATION PLAN - EAST
L1.2	TREE PRESERVATION PLAN - WEST
L1.3	TREE PRESERVATION PLAN
L1.4	LANDSCAPE PLAN - EAST
L1.5	LANDSCAPE PLAN - WEST

PROFESSIONAL ENGINEER'S CERTIFICATION

I, LESLEY E. NETZER, A LICENSED PROFESSIONAL ENGINEER OF IL, HEREBY
CERTIFY THAT THIS SUBMISSION, PERTAINING ONLY TO THE "C" SERIES CIVIL
SHEETS LISTED ABOVE, WAS PREPARED ON BEHALF OF TORBURN PARTNERS BY
KIMLEY-HORN AND ASSOCIATES, INC. UNDER MY PERSONAL DIRECTION. THIS
TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND
IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

DATED THIS _____ DAY OF _____, A.D., 2015.

IL LICENSED PROFESSIONAL ENGINEER 062-064543
MY LICENSE EXPIRES ON NOVEMBER 30, 2015

Kimley»Horn

© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE ROAD, SUITE 350,
LISLE, IL 60532
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: LEN
DRAWN BY: LEN
CHECKED BY: DMA

**TORBURN
PARTNERS**
1033 SKOKIE BOULEVARD,
SUITE 150
NORTHBROOK, IL 60062

TITLE SHEET

**NORTHWEST
CROSSINGS**
1421 W. SHURE DRIVE
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE:
5/14/2015
KHA PROJECT NO.
168193001
SHEET NUMBER

C0.0

Drawing name: K:\GIS_DEVELOPMENT\148193001\Tortum Partiers - Arlington Heights\148193001\Tortum Partiers - Arlington Heights.dwg C1.0 May 14, 2015 3:39pm By: colleen.thomas
This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of any part of this document without written authorization and assentation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

GENERAL NOTES

- EXISTING SITE TOPOGRAPHY, UTILITIES, RIGHT-OF-WAY AND HORIZONTAL CONTROL, SHOWN ON THE DRAWINGS WERE OBTAINED FROM A SURVEY PREPARED BY:

COMPASS SURVEYING, LTD
26351 ANGER WOODS PARKWAY, SUITE 100
AURORA, IL 60502
TEL: (630) 620-9100

COPIES OF THE SURVEY ARE AVAILABLE FROM THE ENGINEER. SITE CONDITIONS MAY HAVE CHANGED SINCE THE SURVEY WAS PREPARED. CONTRACTORS TO VISIT SITE TO FAMILIARIZE THEMSELVES WITH THE CURRENT CONDITIONS.
- COPIES OF SOILS INVESTIGATION REPORTS MAY BE OBTAINED FROM THE OWNER, ANY BRACING, SHEETING OR SPECIAL CONSTRUCTION METHODS DEEMED NECESSARY BY THE CONTRACTOR IN ORDER TO INSTALL THE PROPOSED IMPROVEMENTS ARE ALL TO BE CONSIDERED AS PART OF THE PROJECT. IF AVAILABLE, ANY ADDITIONAL SOILS DATA NEEDED TO CONFIRM THE CONTRACTOR'S OPINIONS OF THE SUBSOIL CONDITIONS SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN AUTHORIZATION TO ACCESS THE SITE TO CONDUCT A SITE-DEPENDENT SOILS INVESTIGATION.
- THE CONTRACTOR SHALL PHOTOGRAPH THE WORK AREA PRIOR TO CONSTRUCTION FOR THE PURPOSE OF DOCUMENTING EXISTING CONDITIONS.
- EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL PROPOSED WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS WHICH ARE HEREBY MADE A PART THEREOF:
 - "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS," AS PREPARED BY IDOT, LATEST EDITION.
 - "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" AS PUBLISHED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA), LATEST EDITION.
 - "ILLINOIS RECOMMENDED STANDARDS FOR SEWAGE WORKS," AS PUBLISHED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA), LATEST EDITION.
 - REGULATIONS, STANDARDS AND GENERAL REQUIREMENTS SET FORTH BY THE MUNICIPALITY, UNLESS OTHERWISE NOTED ON THE PLANS.
 - THE NATIONAL ELECTRIC CODE.
 - ALL APPLICABLE PROVISIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT ARE HEREIN INCORPORATED BY REFERENCE.
- STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND RECURRING SPECIAL PROVISIONS, INCLUDING THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS, ARE ALL TO BE CONSIDERED AS PART OF THE PROJECT. INCIDENTALS ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THE CONTRACTOR'S WORK MAY NOT BE SPECIFICALLY NOTED, BUT ARE CONSIDERED A PART OF THE CONTRACTOR'S CONTRACT.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL ITEMS REQUIRED FOR CONSTRUCTION OF THE PROJECT, AS SHOWN ON THE PLANS, ARE INCLUDED IN THE CONTRACT. ANY ITEM NOT SPECIFICALLY INCLUDED IN THE CONTRACT, BUT REQUIRED BY THE PLANS, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IN THE EVENT OF A DISCREPANCY WITH THE PLANS AND QUANTITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF "APPROVED" ENGINEERING PLANS WITH THE LATEST REVISION DATE ON THE JOB SITE PRIOR TO THE START OF CONSTRUCTION. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT THEM TO THE SURVEYOR OR ENGINEER BEFORE DOING ANY WORK. OTHERWISE, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS, AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT THE CONTRACTOR'S OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
- THE CONTRACTOR SHALL SUBSCRIBE TO ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS PRIOR TO STARTING WORK. THE CONTRACTOR, BY USING THESE PLANS, AGREES TO HOLD HARMLESS KIMLEY-HORN AND ASSOCIATES, INC., THE MUNICIPALITY, THEIR EMPLOYEES AND AGENTS AND THE OWNER FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, DAMAGES, AND THE COST OF DEFENSE ARISING OUT OF CONTRACTOR(S) PERFORMANCE OF THE WORK DESCRIBED HEREIN.
- THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION METHODS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.
- CONSTRUCTION MATERIALS AND/OR EQUIPMENT MAY NOT BE STORED IN THE RIGHT-OF-WAY, AS DIRECTED BY THE OWNER.
- EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHT-OF-WAYS ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
- OWNER SHALL OBTAIN EASEMENTS AND APPROVAL OF PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR, HOWEVER, SHALL OBTAIN ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS AND EASEMENTS.
- THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- NOTIFICATION OF COMMENCING CONSTRUCTION:
 - THE CONTRACTOR SHALL NOTIFY AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE FULL WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL NOTIFY, AS NECESSARY, ALL TESTING AGENCIES, THE MUNICIPALITY, AND THE OWNER SUFFICIENTLY IN ADVANCE OF CONSTRUCTION.
 - FAILURE OF THE CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN THE TESTING COMPANIES TO BE UNABLE TO VISIT THE SITE AND PERFORM TESTING WILL CAUSE THE CONTRACTOR TO SUSPEND THE OPERATION TO BE TESTED UNTIL THE TESTING AGENCY CAN SCHEDULE TESTING OPERATIONS. COST OF SUSPENSION OF WORK SHALL BE BORNE BY THE CONTRACTOR.
- ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES FOR ALL EMERGENCY TRAFFIC, AS DIRECTED BY THE MUNICIPALITY.
- ANY EXISTING SIGNS, LIGHT STANDARDS, AND UTILITY POLES THAT INTERFERE WITH CONSTRUCTION OPERATIONS ARE NOT NOTED ON THE PLANS FOR REMOVAL AND RESET BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE, AS DIRECTED BY THE ENGINEER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.
- ALL TREES TO BE SAVED SHALL BE IDENTIFIED PRIOR TO CONSTRUCTION BY THE LANDSCAPE ARCHITECT AND SHALL BE PROTECTED PER IDOT SECTION 201.05. THE RIGHT-OF-WAY LINE AND LIMITS OF THE CONTRACTOR'S OPERATIONS SHALL BE CLEARLY DEFINED THROUGHOUT THE CONSTRUCTION PERIOD. ALL TREES NOTED TO REMAIN SHALL BE PROTECTED FROM DAMAGE TO TRUNKS, BRANCHES AND ROOTS. NO EXCAVATING, FILLING OR GRADING IS TO BE DONE INSIDE THE DRIP LINE OF TREES UNLESS OTHERWISE INDICATED.
- LIMB PRUNING SHALL BE PERFORMED UNDER THE SUPERVISION OF AN APPROVED LANDSCAPE ARCHITECT, FORESTER, OR ARBORIST AND SHALL BE UNDERTAKEN IN A TIMELY FASHION SO AS NOT TO INTERFERE WITH CONSTRUCTION. ALL LIMBS, BRANCHES, AND OTHER DEBRIS RESULTING FROM THE CONTRACTOR'S WORK SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. ALL CUTS OVER ONE (1) INCH IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.
- ALL EXISTING PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAWCUT ALONG LIMITS OF PROPOSED REMOVAL BEFORE COMMENCEMENT OF PAVEMENT REMOVAL.
- ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT, AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THE CONTRACTOR'S WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS A PAY ITEM IS LISTED ON THE BID LIST.
- REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC., SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMITS REQUIRED FOR SUCH DISPOSAL.
- THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS, AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEANUP, AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.
- NO UNDERGROUND WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE MUNICIPALITY. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE MUNICIPALITY PRIOR TO INSTALLING PAVEMENT BASE, BINDER, AND SURFACE, AND PRIOR TO POURING ANY CONCRETE AFTER FORMS HAVE BEEN SET, AS NECESSARY.
- WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES AND PIPELINES SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE THE INTEGRITY OF THE EXISTING DRAINAGE SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ANY DAMAGE TO EXISTING STRUCTURE. THE CONTRACTOR'S WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE MERGED INTO THE CONTRACT UNIT PRICE EACH FOR STRUCTURES AND CONTRACT UNIT PRICE PER LINEAL FOOT FOR STORM SEWERS, WHICH SHALL BE PAYMENT IN FULL FOR CLEANING, PATCHING, REMOVAL, AND REPAIR. DISPOSAL OF DEBRIS AND DIRT, DRAINAGE STRUCTURES AND STORM SEWERS CONSTRUCTED AS PART OF THE CONTRACTOR'S PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. NO EXTRA PAYMENT WILL BE MADE FOR CLEANING STRUCTURES OR STORM SEWERS CONSTRUCTED AS PART OF THE CONTRACTOR'S PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLANS. THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123) AND THE MUNICIPALITY FOR UTILITY LOCATIONS.
- THE GENERAL CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO PROVIDE CABLE TV, PHONE, ELECTRIC, GAS AND IRRIGATION SERVICES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING SITE LAYOUTS FOR THESE UTILITIES AND SHALL COORDINATE AND PROVIDE CONDUIT CROSSINGS AS REQUIRED. THIS COORDINATION SHALL BE CONSIDERED INCIDENTAL TO GENERAL CONTRACTOR AGREEMENT WITH THE OWNER. ANY CONFLICTS IN UTILITIES SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR IS TO VERIFY ALL EXISTING STRUCTURES AND FACILITIES AT ALL PROPOSED UTILITY CONNECTION LOCATIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL AND STARTING WORK.
- ANY FIELD TIES ENCOUNTERED SHALL BE INSPECTED BY THE ENGINEER. THE DRAIN TIE SHALL BE CONNECTED TO THE STORM SEWER SYSTEM AND A RECORD KEPT BY THE CONTRACTOR OF THE LOCATIONS AND TURNED OVER TO THE ENGINEER UPON COMPLETION OF THE PROJECT. THE COST OF THE CONTRACTOR'S WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- ALL FRAMES AND LIDS FOR STORM AND SANITARY SEWERS, VALVE VAULT COVERS, FIRE HYDRANTS, AND

- B-BOXES ARE TO BE ADJUSTED TO MEET FINISHED GRADE. THE CONTRACTOR'S ADJUSTMENT IS TO BE MADE BY THE SEWER AND WATER CONTRACTOR, AND THE COST IS TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED BY THE CITY OF AURORA IN RESPECT OF THE PROJECT.
- HYDRANTS SHALL NOT BE FLUSHED DIRECTLY ONTO THE ROAD SUBGRADES. WHENEVER POSSIBLE, HOSES SHALL BE USED TO DIRECT THE WATER INTO LOT AREAS OR THE STORM SEWER SYSTEM, IF AVAILABLE. DAMAGE TO THE ROAD SUBGRADE OR LOT GRADING DUE TO EXCESSIVE WATER SATURATION AND/OR EROSION FROM HYD. FLUSHING OR FROM LEAKS IN THE WATER DISTRIBUTION SYSTEM WILL BE REPAIRED BY THE CONTRACTOR FLUSHING OR USING THE HYDRANT AT THE CONTRACTOR'S OWN EXPENSE. LEAKS IN THE WATER DISTRIBUTION SYSTEM SHALL BE THE RESPONSIBILITY OF THE WATER MAIN CONTRACTOR AND SHALL BE REPAIRED BY THE WATER MAIN CONTRACTOR.
- TRENCH BACKFILL WILL BE REQUIRED TO THE FULL DEPTH ABOVE SEWERS AND WATERMAIN WITHIN TWO (2) FEET HORIZONTAL OF PROPOSED OR EXISTING PAVEMENT.
- IF SOFT, SPONGY, OR OTHER UNSUITABLE SOILS WITH UNCONFINED COMPRESSIVE STRENGTH LESS THAN 0.5 TSF ARE ENCOUNTERED AT THE BOTTOM OF THE TRENCH, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH WELL-COMPACTED, CRUSHED LIMESTONE BEDDING MATERIAL. IF ROCK IS ENCOUNTERED, IT SHALL BE REMOVED TO AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE TO ALLOW PROPER THICKNESS OF BEDDING. ANY UNDERCUTS OF TWO (2) FEET OR LESS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. DEPTHS GREATER THAN TWO (2) FEET SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PROCEEDING WITH THE TRENCH.
- THE TRENCHES FOR PIPE INSTALLATION SHALL BE KEPT DRY AT ALL TIMES DURING PIPE PLACEMENT. APPROPRIATE FACILITIES TO MAINTAIN THE DRY TRENCH SHALL BE PROVIDED BY THE CONTRACTOR, AND THE COST OF SUCH SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE ITEM. PLANS FOR THE SITE REMOVAL, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION UNLESS APPROVED IN WRITING BY THE OWNER.
- AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE PROPER INLET PROTECTION EROSION CONTROL AT LOCATIONS INDICATED BY THE ENGINEER. THE PURPOSE OF THE INLET PROTECTION WILL BE TO MINIMIZE THE AMOUNT OF SILTATION THAT NORMALLY WOULD ENTER THE STORM SEWER SYSTEM FROM ADJACENT AND/OR UPSTREAM DRAINAGE AREAS.
- AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.
- EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH IEPA REGULATIONS AND IDOT STANDARDS FOR SOIL EROSION AND SEDIMENTATION. THAT AND SHALL BE MAINTAINED BY THE CONTRACTOR AND REMAIN IN PLACE UNTIL A SUITABLE GROWTH OF GRASS, ACCEPTABLE TO THE ENGINEER, HAS DEVELOPED.
- THE CONTRACTOR SHALL CONFORM TO ALL EROSION CONTROL REQUIREMENTS AS SET FORTH BY THE STANDARDS FOR SOIL EROSION AND SEDIMENTATION AND THE RULES THAT IN PERMIT PROGRAM REQUIREMENTS AND GOVERNING MUNICIPALITY. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES AS INDICATED ON THE EROSION CONTROL DRAWINGS AND SPECIFICATIONS AS WELL AS THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS INDICATED IN THE SWPPP AT A MINIMUM, INCLUDING EROSION CONTROL MEASURES AND INSPECTION FREQUENCY, AS REQUIRED BY THE IEPA NPDES PHASE II PERMIT PROGRAM REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL SWPPP DOCUMENTATION CURRENT AND READILY AVAILABLE ON THE PROJECT SITE AT ALL TIMES FOR REVIEW BY THE OWNER, ENGINEER, TESTING AGENCIES, KIMLEY-HORN AND ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR SUPPLIERS, WHICH CONTRIBUTE TO DEFICIENCIES IN THE SWPPP OR ANY VIOLATIONS RESULTING FROM INADEQUATE EROSION CONTROL PROTECTION AND/OR DOCUMENTATION.
- THE PAVEMENT SHALL BE KEPT FREE OF MUD AND DEBRIS AT ALL TIMES. IT MAY BE NECESSARY TO KEEP A SWEEPER ON-SITE AT ALL TIMES.
- ALL DISTURBED AREAS OF THE RIGHT-OF-WAY SHALL BE FULLY RESTORED TO PRE-CONSTRUCTION CONDITIONS WITH A MINIMUM OF SIX (6) INCHES OF TOPSOIL, SEEDING, AND MULCH AS PER IDOT STANDARDS.
- ALL PROPOSED GRADES SHOWN ON PLANS ARE FINISHED SURFACE ELEVATIONS, UNLESS NOTED OTHERWISE.
- ALL TESTING SHALL BE THE RESPONSIBILITY AND EXPENSE OF THE CONTRACTOR. IF REQUESTED BY THE MUNICIPALITY OR ENGINEER, COPIES OF ALL TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL.
- PROVIDE SMOOTH VERTICAL CURVES THROUGH HIGH AND LOW POINTS INDICATED BY SPOT ELEVATIONS. PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADIES. AVOID RIDGES AND DEPRESSIONS.
- WHEN REQUIRED, THE CONTRACTOR SHALL NOTIFY THE OWNER WHEN RECORD DRAWINGS CAN BE PREPARED. RECORD DRAWINGS SHALL INDICATE THE FINAL LOCATION AND LAYOUT OF ALL IMPROVEMENTS, INCLUDING VERIFICATION OF ALL CONCRETE PADS, INVERTS, AND SPOT GRADE ELEVATIONS, AND INCORPORATE ALL FIELD DESIGN CHANGES APPROVED BY THE OWNER.
- BEFORE ACCEPTANCE, ALL WORK SHALL BE INSPECTED BY THE MUNICIPALITY, AS NECESSARY.

EARTHWORK NOTES

- GENERAL
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE.
 - ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTOR'S USE IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND BE KNOWLEDGEABLE OF ALL SITE CONDITIONS.
 - THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE, THAT PAVEMENT THICKNESS, TOPSOIL, ETC., MUST BE ACCOUNTED FOR.
 - THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE CONTRACTOR SHALL PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRADE TRAFFIC.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT AND FILTER FENCING, ETC., TO PROTECT ADJACENT PROPERTY, WETLANDS, ETC., SHALL OCCUR BEFORE BEGINING.
 - PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A CONSTRUCTION FENCE AROUND ANY TREE DESIGNATED TO BE PRESERVED. THE FENCE SHALL BE IN A CIRCLE CENTERED AROUND THE TREE, THE DIAMETER OF WHICH SHALL BE SUCH THAT THE ENTIRE DRIP ZONE (EXTENT OF FURTHEST EXTENDING BRANCHES) SHALL BE WITHIN THE FENCE LIMITS. THE EXISTING GRADE WITHIN THE FENCED AREA SHALL NOT BE DISTURBED.
- TOPSOIL EXCAVATION INCLUDES:
 - EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH OR FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO STRIPPING TOPSOIL OR FILLING AREAS.
 - PLACEMENT OF EXCAVATED MATERIAL IN OWNER-DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL. PROVIDE NECESSARY EROSION CONTROL MEASURES FOR STABILIZATION.
 - TOPSOIL STOCKPILED FOR RESPIREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED OF OFF-SITE.
 - TOPSOIL RESPIREAD SHALL INCLUDE HAULING AND SPREADING SIX (6) INCHES OF TOPSOIL DIRECTLY OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER.
 - MODERATE COMPACTION IS REQUIRED IN NON-STRUCTURAL FILL AREAS.
- EARTH EXCAVATION INCLUDES:
 - EXCAVATION OF SUBSURFACE MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.1 FEET OF THE PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINE GRADING OPERATION.
 - PLACEMENT OF SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.1 FEET. THE FILL MATERIALS SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION.
 - STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL, WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THE FILLER SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.
 - COMPACTION OF SUITABLE MATERIALS SHALL BE TO AT LEAST 93% OF THE MODIFIED PROCTOR DRY DENSITY WITHIN PROPOSED PAVEMENT AREAS, SIDEWALK, ETC. COMPACTION SHALL BE AT LEAST 95% OF THE MODIFIED PROCTOR WITHIN PROPOSED BUILDING PAD AREAS.
 - UNSATURABLE MATERIAL: UNSUITABLE MATERIALS SHALL BE CONSIDERED MATERIAL THAT IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SUD MATERIAL AND TO WHAT EXTENT SHALL BE MADE BY THE ENGINEER WITH THE CONCURRENCE OF THE OWNER.
- MISCELLANEOUS. THE CONTRACTOR SHALL:
 - SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.
 - SCARIFY, DISC, AERATE, AND COMPACT, TO THE DEGREE SPECIFIED, THE UPPER TWELVE (12) INCHES OF ANY SUITABLE SUBGRADE MATERIAL IN ALL AREAS THAT MAY BE SUBJECT TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.
 - PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.
 - BACKFILL THE CURB AND GUTTER AFTER ITS CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL.
 - TESTING AND FINAL ACCEPTANCE
 - THE CONTRACTOR SHALL PROVIDE AS A MINIMUM A FULLY LOADED SIX-WHEEL TANDEM AXLE TRUCK FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND THE BASE COURSE MATERIAL. THIS SHALL BE WITNESSED BY THE ENGINEER AND THE OWNER. (SEE PAVING SPECIFICATION.)
 - ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL OR OTHERWISE CORRECTED AND APPROVED BY THE ENGINEER.

PAVING NOTES

- GENERAL
 - PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION, AND COMPACTION; PLACEMENT OF SUBGRADE OR BASE COURSE MATERIALS; BITUMINOUS BINDER AND/OR SURFACE COURSES; FORMING, FINISHING, AND CURING CONCRETE PAVEMENT, CURBS, AND WALKS; AND FINAL CLEAN-UP AND ALL RELATED WORK.
 - COMPACTION REQUIREMENTS [REFERENCE ASTM D-1557 (MODIFIED PROCTOR)]: SUBGRADE = 93%; SUBBASE = 93%; AGGREGATE BASE COURSE = 95%; BITUMINOUS COURSE = 95% OF MAXIMUM CURED DRY DENSITY OF THE HIGHWAY STANDARD SPECIFICATION.
 - IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING WARNING DEVICES AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION. ALL SUCH DEVICES AND THEIR INSTALLATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, AND IN ACCORDANCE WITH THE MUNICIPALITY CODE.
 - SUBGRADE PREPARATION
 - EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.1 FOOT, PLUS OR MINUS, OF PLAN ELEVATION. THE CONTRACTOR SHALL CONFIRM THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISHED TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS. UNLESS THE CONTRACTOR ADVISES THE ENGINEER IN WRITING PRIOR TO FINE GRADING FOR BASE COURSE CONSTRUCTION, IT IS UNDERSTOOD THAT THE CONTRACTOR HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.
 - PRIOR TO THE PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE PROOF-ROLLED AND INSPECTED FOR UNSUITABLE MATERIALS AND/OR EXCESSIVE MOVEMENT. IF UNSUITABLE SUBGRADE IS ENCOUNTERED, IT SHALL BE CORRECTED. THIS MAY INCLUDE ONE OR MORE OF THE FOLLOWING METHODS:
 - SCARIFY, DISC, AND AERATE.
 - REMOVE AND REPLACE WITH STRUCTURAL CLAY FILL.
 - REMOVE AND REPLACE WITH GRANULAR MATERIAL.
 - USE OF GEOTEXTILE FABRIC.
- MAXIMUM DEFLECTION ALLOWED IN ISOLATED AREAS MAY BE ONE-QUARTER (1/4) INCH TO ONE-HALF (1/2) INCH IF NO DEFLECTION OCCURS OVER THE MAJORITY OF THE AREA.
- PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE-GRADED TO WITHIN 0.04 FEET (1/2 INCH) OF FINAL SUBGRADE ELEVATION. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FOUR (4) INCHES OF SUBGRADE TO ENSURE THE PROPER THICKNESS OF PAVEMENT COURSES. NO CLAIMS FOR EXCESS QUANTITY OF BASE MATERIALS DUE TO IMPROPER SUBGRADE PREPARATION WILL BE HONORED.
 - PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE SHALL BE APPROVED BY THE TESTING ENGINEER.
- CONCRETE WORK
 - ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE WITH AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%) PERCENT. CONCRETE SHALL BE A MINIMUM OF SIX (6) INCHES THICK. AGGREGATE SHALL BE A MINIMUM OF 3/4" MAXIMUM SIZE. CONCRETE SHALL BE CURED WITH A MINIMUM OF 14 DAYS AND A MINIMUM OF 4,000 PSI COMPRESSIVE STRENGTH AT TWENTY-EIGHT (28) DAYS. ALL CONCRETE SHALL BE BROOM-FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL.
 - CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS. THE CONTRACTOR IS OBLIGED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS SECTION TO DETERMINE THE GUTTER FLAG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB AND GUTTER. PRE-MOLDED FIRE EXPANSION JOINTS, WITH TWO (2) INCHES OF EPOXY-RESIN COATED STEEL DOWEL BARS, SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES
 - CURBS SHALL BE DERESSED AND MEET THE SLOPE REQUIREMENTS OF THE ILLINOIS ACCESSIBILITY CODE AT LOCATIONS WHERE PUBLIC WALKS INTERSECT CURB LINES AND OTHER LOCATIONS, AS DIRECTED, FOR THE PURPOSE OF PROVIDING ACCESSIBILITY.
 - THE CURBS SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE.
 - CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE SCORED JOINTS AT 5-FOOT INTERVALS AND 1/2-INCH PRE-MOLDED FIRE EXPANSION JOINTS AT 20-FOOT INTERVALS AND ADJACENT TO CONCRETE CURBS, DRIVEWAYS, FOUNDATIONS, AND OTHER STRUCTURES.
 - CONCRETE CURING AND PROTECTION SHALL BE PER IDOT STANDARDS. TWO (2) COATS OF IDOT APPROVED CURING AGENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.
 - THE COST OF AGGREGATE BASE OR SUBBASE UNDER CONCRETE WORK SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONCRETE ITEM.
 - FLEXIBLE PAVEMENT
 - THE PAVEMENT MATERIALS FOR BITUMINOUS STREETS, PARKING LOTS, AND DRIVE AISLES SHALL BE AS DETAILLED ON THE PLANS. UNLESS OTHERWISE SHOWN ON THE PLANS, THE FLEXIBLE PAVEMENTS SHALL CONSIST OF AGGREGATE BASE COURSE, TYPE B, BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, 1.9, NSQ, AND BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX NSQ, OF THE THICKNESS AND SPECIFIED FINISH PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS.
 - ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE BINDER COURSE IS LAID. THE AGGREGATE BASE SHALL BE UNIFORMLY PRIME COATED AT A RATE OF 0.4 TO 0.5 GALLONS PER SQUARE YARD PRIOR TO PLACING THE BINDER COURSE. PRIME COAT MATERIALS SHALL BE IDOT APPROVED.
 - PRIOR TO PLACEMENT OF THE SURFACE COURSE, THE BINDER COURSE SHALL BE CLEANED AND TACK-COATED IF DUSTY OR DIRTY. ALL DAMAGED AREAS IN THE BINDER, BASE, OR CURB SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER PRIOR TO LAYING THE SURFACE COURSE. THE CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND STAFF NECESSARY, INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE OWNER, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. THE TACK COAT SHALL BE UNIFORMLY APPLIED TO THE BINDER COURSE AT A RATE OF 0.05 TO 0.10 GALLONS PER SQUARE YARD. TACK COAT SHALL BE IDOT APPROVED.
 - SEAMS IN BAM, BINDER, AND SURFACE COURSE SHALL BE STAGGERED A MINIMUM OF 6 INCHES.
 - TESTING AND FINAL ACCEPTANCE.
 - THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE AND PAVEMENT MATERIALS ESTABLISHED BY THE ENGINEER.
 - PRIOR TO PLACEMENT OF THE BITUMINOUS CONCRETE SURFACE COURSE, THE CONTRACTOR, WHEN REQUESTED BY THE MUNICIPALITY, SHALL BE RESPONSIBLE TO PRESERVE SPECIMENS OF THE BINDER COURSE WITH A CORE DRILL WHERE DIRECTED, FOR THE PURPOSE OF THICKNESS VERIFICATION.
 - WHEN REQUIRED BY THE MUNICIPALITY, THE CONTRACTOR SHALL OBTAIN SPECIMENS OF THE FULL DEPTH BITUMINOUS CONCRETE PAVEMENT STRUCTURE WITH A CORE DRILL WHERE DIRECTED IN ORDER TO CONFIRM THE PLAN THICKNESS. DEFICIENCIES IN THICKNESS SHALL BE ADJUSTED FOR BY THE METHOD REQUIRED BY IDOT STANDARDS.
 - FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.
 - ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE MUNICIPALITY CODE. WHEN CONFLICTS ARISE BETWEEN MUNICIPAL CODE, GENERAL NOTES AND SPECIFICATIONS, THE MORE STRINGENT SHALL TAKE PRECEDENCE.

SIGNAGE AND PAVEMENT MARKING NOTES

- ALL SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) STANDARDS.
- SIGNS: SIGNS SHALL BE CONSTRUCTED OF 0.080-INCH THICK PLAT ALUMINUM PANELS WITH REFLECTORIZED LEGEND ON THE FACE. LEGEND SHALL BE IN ACCORDANCE WITH THE MUTCD.
- POSTS: SIGN POSTS SHALL BE A HEAVY-DUTY STEEL "J" SHAPED CHANNEL WEIGHING 30 POUNDS/FOOT, SUCH AS A TYPE B METAL POST, AS PER THE IDOT STANDARDS (OR 2-INCH PERFORATED STEEL TUBE).
- SIGNS AND POSTS SHALL BE INSTALLED IN ACCORDANCE WITH IDOT STANDARDS.
- PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS IN THE PUBLIC RIGHT-OF-WAY, SUCH AS STOP LINES, CENTERLINES, CROSSWALKS, AND DIRECTIONAL ARROWS, SHALL BE REFLECTORIZED THERMOPLASTIC HOT ROLLED INTO PAVEMENT.
- PAVEMENT MARKINGS ON BIKE PATHS, PARKING LOT STALLS, AND SIMILAR "LOW-WEAR" APPLICATIONS, SHALL BE PAINT IN ACCORDANCE WITH IDOT STANDARDS.
- COLOR, WIDTH, STYLE, AND SIZE OF ALL MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND LOCAL CODE. STANDARD PARKING SPACES SHALL BE PAINTED WHITE.
- THERMOPLASTIC MARKINGS SHALL BE INSTALLED WHEN THE PAVEMENT TEMPERATURE IS 55 DEGREES FAHRENHEIT AND RISING. PAINT MARKINGS MAY BE INSTALLED WHEN THE AIR TEMPERATURE IS 50 DEGREES FAHRENHEIT AND RISING.

SANITARY SEWER NOTES

- SANITARY SEWER PIPE: ALL SANITARY SEWER PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN. UNLESS OTHERWISE NOTED ON THE PLANS, ALL SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE PLASTIC PIPE (PVC SDR-26), CONFORMING TO ASTM D3034 AND D2241 WITH ELASTOMERIC GASKET JOINTS CONFORMING TO ASTM D5016 AND D3212. ANY CHANGES TO THE PIPE MATERIAL, SIZE AND TYPE MUST BE APPROVED BY THE OWNER, ENGINEER AND MUNICIPALITY PRIOR TO ORDERING MATERIALS OR INSTALLING THE PIPE. ALL SANITARY SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

PIPE SIZE	CODE	PIPE MATERIAL
4"-6"	DIP	POLYVINYL CHLORIDE PLASTIC PIPE SDR-26 (ASTM D3034 AND D2241)
4"-48"	DIP	DUCTILE IRON PIPE, CLASS 52 (ANSI 21.51 AND AWWA C151)
- BAND-SEAL OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN CONFORMANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) STANDARDS) SHALL BE BEDDED WITH A MINIMUM OF FOUR (4) INCHES MORE THAN EIGHT (8) INCHES. AS A MINIMUM, THE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 704.01 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE STATE OF ILLINOIS OR ASTM C-33. THE GRADATION SHALL CONFORM TO GRADATION CA-11 OR CA-13 OF THE ILLINOIS STANDARD SPECIFICATIONS AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
- ALL UNSUITABLE MATERIALS SHALL BE REMOVED BEFORE THE PROPOSED SANITARY SEWER AND REPLACED WITH COMPACTED CRUSHED GRAVEL OR STONE, AS PER IDOT STANDARDS.
- ALL TRENCHES BENEATH PROPOSED OR EXISTING UTILITIES, PAVEMENTS, ROADWAYS, SIDEWALKS, AND FOR A DISTANCE OF TWO (2) FEET ON EITHER SIDE OF SAME, AND/OR WHERE SHOWN ON THE PLANS, SHALL BE BACKFILLED WITH GRANULAR BACKFILL PER IDOT STANDARDS AND THOROUGHLY MECHANICALLY COMPACTED IN 9-INCH THICK (LOOSE MEASUREMENT) LAYERS. JETTING WITH WATER IS NOT PERMITTED.

- ALL SANITARY SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.
- CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM SHALL NOT BE DONE UNTIL AUTHORIZED BY THE MUNICIPALITY.
- WATERMANS SHALL BE SEPARATED FROM SANITARY SEWERS AND STORM SEWERS IN ACCORDANCE WITH ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) REQUIREMENTS, AS SPECIFIED IN THE STANDARDS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.
- NO WATER LINE SHALL BE PLACED IN THE SAME TRENCH AS A SEWER LINE, EXCEPT UNDER SPECIAL CIRCUMSTANCES SPECIFICALLY UNDER THE FOLLOWING RULES:
 - IF NECESSARY PERMISSION SHALL BE OBTAINED FROM THE MUNICIPALITY IN WRITING PRIOR TO BEGINNING CONSTRUCTION.
 - THE BOTTOM OF A WATER LINE SHALL BE INSTALLED ON A SHELF A MINIMUM OF 18 INCHES ABOVE THE TOP OF THE SEWER AND 18 INCHES HORIZONTALLY AWAY FROM THE EDGE OF THE SEWER.
- ALL SANITARY MANHOLES (AND STORM MANHOLES IN COMBINED SEWER AREAS) SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE. A WATERIGHT BOOT, CONFORMING TO ASTM C-923, SHALL BE USED AT THE PIPE-STRUCTURE CONNECTION.
- ALL PIPE CONNECTION OPENINGS SHALL BE PRECAST WITH RESILIENT RUBBER WATER-TIGHT SLEEVES. THE BOTTOM OF THE MANHOLE SHALL HAVE A CONCRETE BENCH POURED TO FACILITATE SMOOTH FLOWS.
- FRAMES AND LIDS: SEE DETAILS FOR ALL SANITARY SEWER MANHOLE FRAMES AND LIDS. THE LIDS SHALL HAVE RECESSED (CONCEALED) PICK HOLES AND BE SELF-SEALING WITH AN "OT" RING GASKET. THE LIDS SHALL HAVE THE WORD "SANITARY" EMBOSSED ON THE SURFACE. THE JOINTS BETWEEN THE FRAME AND CONCRETE SECTION SHALL BE SEALED WITH A BUTYL ROPE.
- A MAXIMUM OF TWELVE (12) INCHES OF CONCRETE-ADJUSTING RINGS SHALL BE USED TO ADJUST FRAME ELEVATIONS. RINGS SHALL BE SEALED TOGETHER WITH BUTYL ROPE.
- CLEANING: ALL MANHOLES AND PIPES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS, AND ALL VESD LEAKAGE ELIMINATED, BEFORE FINAL INSPECTION AND ACCEPTANCE.
- TESTING: DEFLECTION, AIR, AND LEAKAGE TESTING WILL BE REQUIRED. THE PROCEDURE AND ALLOWABLE TESTING LIMITS SHALL BE IN ACCORDANCE WITH THE STANDARDS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS.
- TESTING THE ALIGNMENT/STRAIGHTNESS SHALL BE IN ACCORDANCE WITH THE MUNICIPALITY CODE.
- TELEVISION: IF REQUIRED BY THE MUNICIPALITY, ALL SANITARY SEWERS SHALL BE TELEVISED, AND A COPY OF THE TAPE AND A WRITTEN REPORT SHALL BE SUBMITTED AND REVIEWED BY THE MUNICIPALITY BEFORE FINAL ACCEPTANCE. THE TELEVISION SHALL BE CONDUCTED AT THE LOCATION OF ANY DEFECTS, WATER LEVEL, LEAKS, AND LENGTHS. IDENTIFY MANHOLE TO MANHOLE BOTH VERBALLY AND ON-SCREEN USING MANHOLE NUMBERS FROM APPROVED PLANS. ORDER OF WRITTEN REPORT SHALL BE THE SAME AS THE ORDER OF THE PLANS.
- TEST RESULTS: IF THE SANITARY SEWER INSTALLATION FAILS TO MEET THE TEST REQUIREMENTS SPECIFIED BY THE MUNICIPALITY, THE CONTRACTOR SHALL DETERMINE THE CAUSE AND REPAIR, OR REPLACE ALL MATERIALS AND WORKMANSHIP, AS MAY BE NECESSARY TO COMPLY WITH THE TEST REQUIREMENTS.
- CERTIFICATION: CONTRACTOR SHALL SUBMIT CERTIFIED COPIES OF ALL REPORTS OF TESTS CONDUCTED BY AN INDEPENDENT LABORATORY BEFORE INSTALLATION OF PVC PLASTIC PIPE. TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH STANDARD METHOD OF TEST FOR "EXTERNAL LOADING PROPERTIES OF PLASTIC PIPE BY PARALLEL PLATE LOADING," ASTM STANDARDS D-2241, AS APPROPRIATE FOR THE PIPE, TO BE USED. TESTING SHALL ALSO BE CONDUCTED TO DEMONSTRATE JOINT PERFORMANCE AT FIVE (5) PERCENT MAXIMUM DIAMETRIC DEFLECTION OF THE SPIGOT.
- CONTRACTOR SHALL VERIFY THAT THE TESTING METHODS DESIGNATED HEREIN ARE ACCEPTABLE TO THE LOCAL AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.

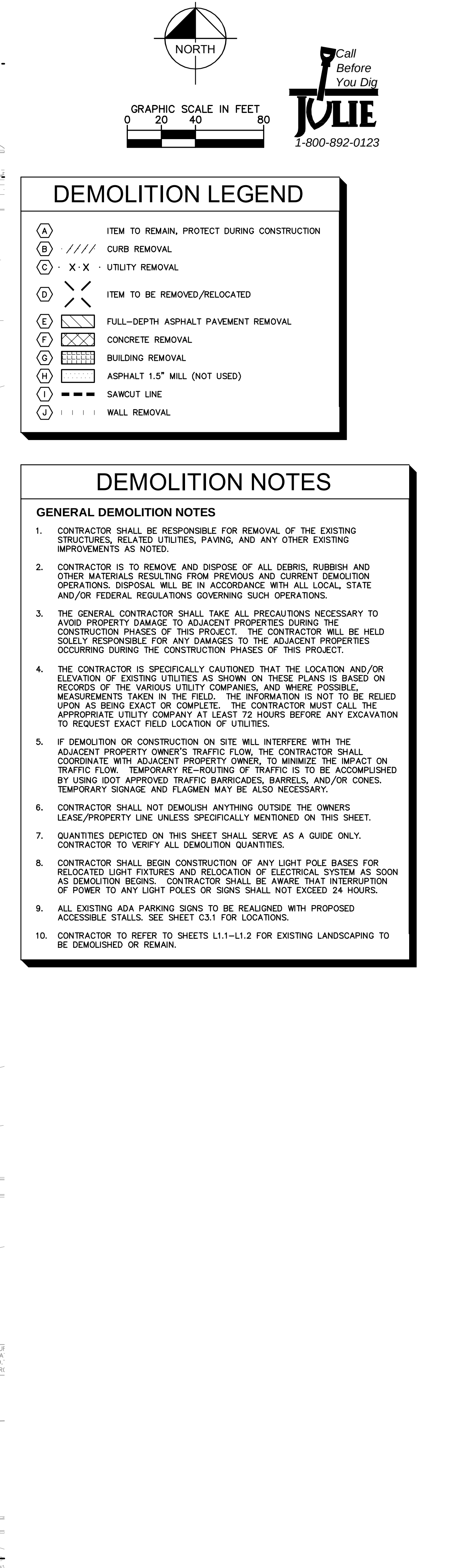
STORM SEWER NOTES

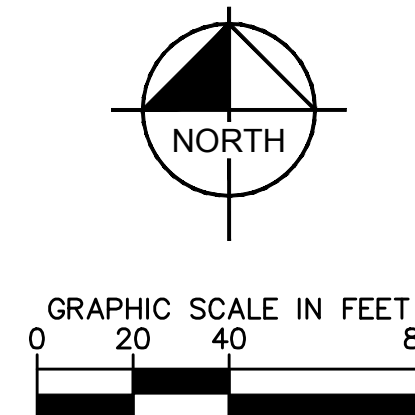
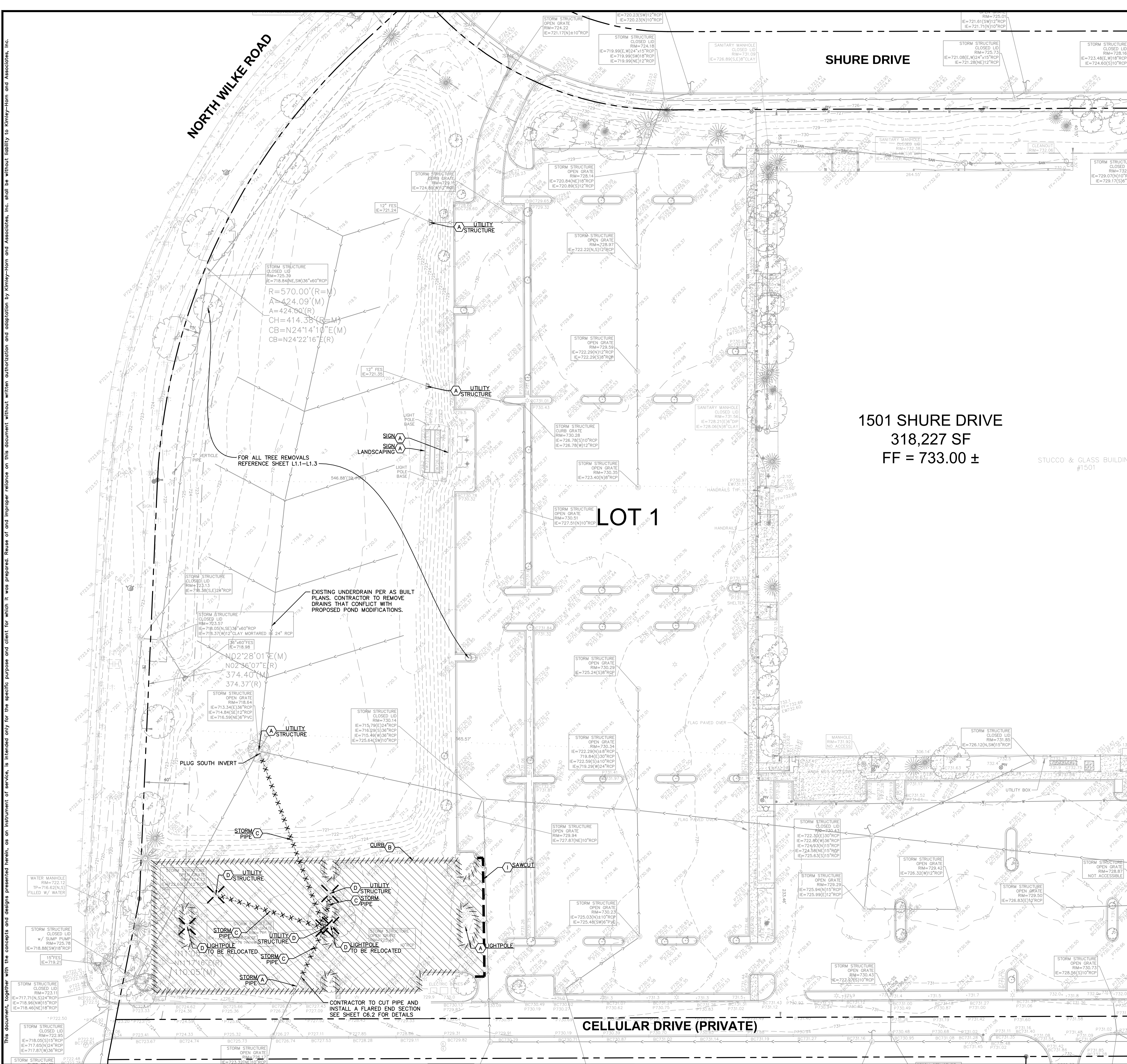
- STORM SEWER PIPE: ALL STORM SEWER PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN. UNLESS OTHERWISE NOTED ON THE PLANS, ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR DETERMINING PIPE CLASS AND CONFORMING TO ASTM C-115. ANY CHANGES TO THE PIPE MATERIAL, SIZE AND TYPE MUST BE APPROVED BY THE OWNER, ENGINEER AND MUNICIPALITY PRIOR TO ORDERING MATERIALS OR INSTALLING THE PIPE. ALL STORM SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

PIPE SIZE	CODE	PIPE MATERIAL
12"-60"	RCP	REINFORCED CONCRETE PIPE (ASTM C78); SEE IDOT SPECS FOR PIPE CLASS
6"-12"	PVC	POLYVINYL CHLORIDE PLASTIC PIPE SDR-26 (ASTM D3034 AND D2241)
3"-48"	HDPE	HIGH DENSITY POLYETHYLENE PIPE
3"-48"	DIP	DUCTILE IRON PIPE, CLASS 52 (ANSI 21.51 AND AWWA C151)
- BAND-SEAL OR SIMILAR COUPLING SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS.
- ALL FOOTING DRAIN DISCHARGE PIPES AND DOWN SPOUTS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
- CONSTRUCTION: ALL STORM SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.
- COVER: THE CONTRACTOR SHALL MAINTAIN AT LEAST TWO (2) FEET OF COVER OVER THE TOP OF SHALLOW PIPES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL MOUND OVER ANY PIPES THAT ARE LESS THAN TWO (2) FEET OF COVER DURING CONSTRUCTION UNTIL THE AREA IS FINAL GRADED OR PAVED.
- STRUCTURES: MANHOLE, CATCH BASIN, AND INLET BOTTOMS SHALL BE PRECAST CONCRETE SECTIONAL UNITS OR MONOLITHIC CONCRETE. MANHOLES AND CATCH BASINS SHALL BE A MINIMUM OF FOUR (4) FEET IN DIAMETER UNLESS OTHERWISE SPECIFIED ON THE PLANS. STRUCTURE JOINTS SHALL BE SEALED WITH "OT" RING OR BUTYL ROPE. A MAXIMUM OF TWELVE (12) INCHES OF ADJUSTING RINGS SHALL BE USED.
- A CONCRETE BENCH TO DIRECT FLOWS SHALL BE CONSTRUCTED IN THE BOTTOM OF ALL INLETS AND MANHOLES.
- THE FRAME, GATE, AND/OR CLOSED LID SHALL BE CAST IRON OF THE TYPE SHOWN ON THE PLANS.
- CLEANING: THE STORM SEWER SYSTEM SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL INSPECTION AND TESTING.
- THE STORM SEWER SHALL BE TELEVISED IF REQUIRED BY THE MUNICIPALITY.
- MANHOLES, CATCH BASINS, INLETS, FRAMES, GRATES, AND OTHER STRUCTURES SHALL BE CONSTRUCTED OF THE TYPE, STYLE, AND SIZE AS SET FORTH WITH THE ORDINANCES AND STANDARDS OF THE MUNICIPALITY.
- ALL PVC PIPES CONNECTED TO REINFORCED CONCRETE PIPE SHALL BE CORED AND BOOTED PER THE MUNICIPALITY REQUIREMENTS.

WATERMAIN NOTES

- WATERMAIN PIPE: ALL WATERMAIN PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN. UNLESS OTHERWISE NOTED ON THE PLANS, ALL WATERMAIN PIPE SHALL BE CONSTRUCTED OF BITUMINOUS CONCRETE-CEMENT-LINED DUCTILE IRON PIPE, IN CONFORMANCE TO ANSI A21.51 (AWWA C151), CEMENT MORTAR LINING SHALL CONFORM TO ANSI A21.4 (AWWA C104). THE JOINTS SHALL BE





DEMOLITION LEGEND

- | | |
|--|---|
| | ITEM TO REMAIN, PROTECT DURING CONSTRUCTION |
| | CURB REMOVAL |
| | UTILITY REMOVAL |
| | ITEM TO BE REMOVED/RELOCATED |
| | FULL-DEPTH ASPHALT PAVEMENT REMOVAL |
| | CONCRETE REMOVAL |
| | BUILDING REMOVAL |
| | ASPHALT 1.5" MILL (NOT USED) |
| | SAWCUT LINE |
| | WALL REMOVAL |

DEMOLITION NOTES

GENERAL DEMOLITION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.
2. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
3. THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
5. IF DEMOLITION OR CONSTRUCTION ON SITE WILL INTERFERE WITH THE EXISTING PROPERTY OWNER'S TRAFFIC FLOW, THE CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNER, TO MINIMIZE THE IMPACT ON TRAFFIC FLOW. TEMPORARY RE-ROUTING OF TRAFFIC IS TO BE ACCOMPLISHED BY USING IDOT APPROVED TRAFFIC BARRICADES, BARRELS, AND/OR CONES. TEMPORARY SIGNAGE AND FLAGMEN MAY BE ALSO NECESSARY.
6. CONTRACTOR SHALL NOT DEMOLISH ANYTHING OUTSIDE THE OWNERS LEASE/PROPERTY LINE UNLESS SPECIFICALLY MENTIONED ON THIS SHEET.
7. QUANTITIES DEPICTED ON THIS SHEET SHALL SERVE AS A GUIDE ONLY. CONTRACTOR TO VERIFY ALL DEMOLITION QUANTITIES.
8. CONTRACTOR SHALL BEGIN CONSTRUCTION OF ANY LIGHT POLE BASES FOR RELOCATED LIGHT FIXTURES AND RELOCATION OF ELECTRICAL SYSTEM AS SOON AS DEMOLITION BEGINS. CONTRACTOR SHALL BE AWARE THAT INTERRUPTION OF POWER TO ANY LIGHT POLES OR SIGNS SHALL NOT EXCEED 24 HOURS.
9. ALL EXISTING ADA PARKING SIGNS TO BE REALIGNMENT WITH PROPOSED ACCESSIBLE STALLS. SEE SHEET C3.1 FOR LOCATIONS.
10. CONTRACTOR TO REFER TO SHEETS L1.1-L1.2 FOR EXISTING LANDSCAPING TO BE DEMOLISHED OR REPAIR.

1501 SHURE DRIVE
318,227 SF
FF = 733.00 ±

LOT 1

**NORTHWEST
CROSSINGS**
1421 W. SHURE DRIVE
ARLINGTON HEIGHTS, IL 60005

DEMOLITION
PLAN - WEST

**TORBURN
PARTNERS**
1033 SKOKIE BOULEVARD
SUITE 150
NORTHBROOK, IL 60062

Kimley»»Horn
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
101 WARRENVILLE ROAD, SUITE 350,
LISLE, IL 60532
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

[illegible]

ORIGINAL ISSUE:
5/14/2015

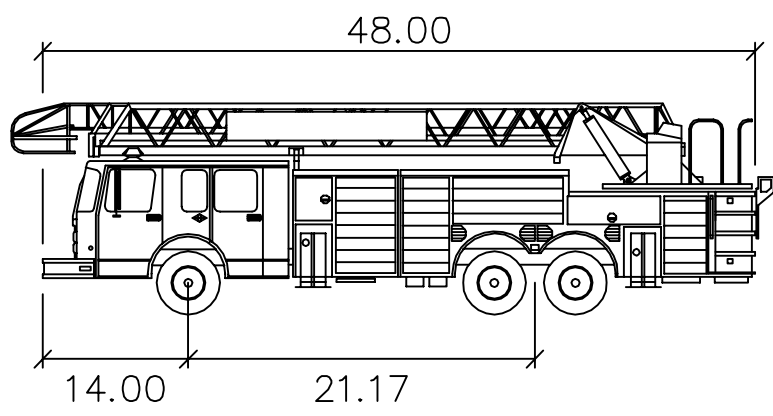
CHA PROJECT NO.
168193001

SHEET NUMBER

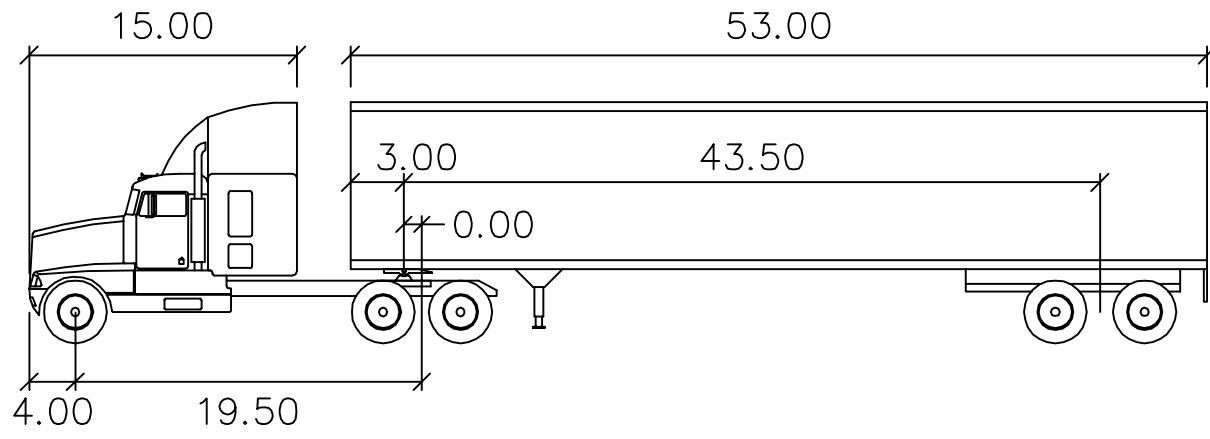
C2.2

Drawing name: K:\GIS_LDEV\168193001 Torburn Partners - Arlington Heights\2 Design\CADD\PlanSheets\Final Engineering\C3.0-C3.2 SITE PLAN.dwg C3.0 May 18, 2015 10:05am by: jdelaney
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

TRUCK ROUTE DETAILS



Arlington Heights Tower 131
Width : 8.50
Track : 6.91
Lock to Lock Time : 6.0
Steering Angle : 40.0



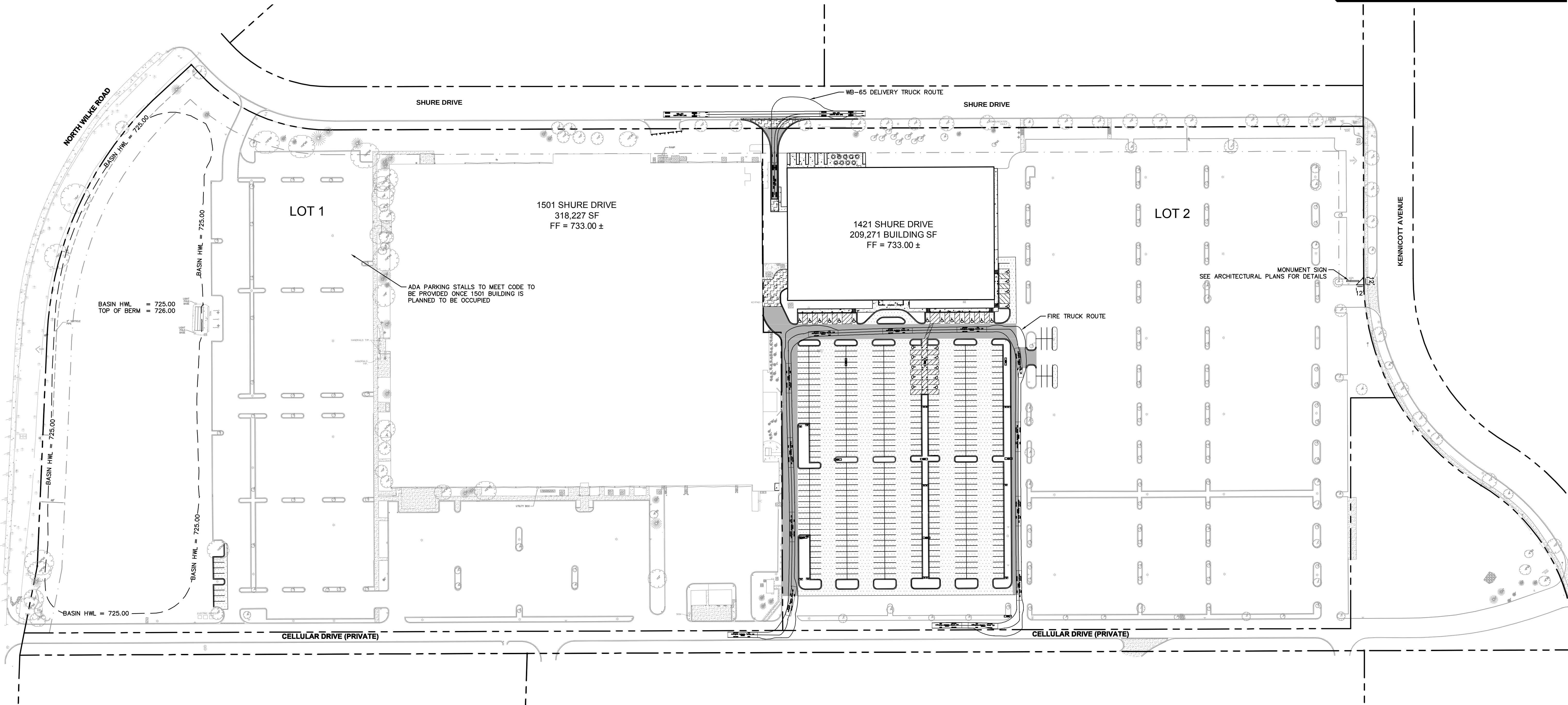
WB-65 feet
Tractor Width : 8.00
Tractor Track : 8.50
Tractor Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 70.0

PAVING AND CURB LEGEND

- STANDARD DUTY ASPHALT PAVEMENT
SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- HEAVY DUTY ASPHALT PAVEMENT
SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
- CONCRETE SIDEWALK
SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
*SEE ARCHITECTURAL PLANS FOR SCOURING PATTERN
- HEAVY DUTY CONCRETE PAVEMENT
SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
*SEE ARCHITECTURAL PLANS FOR SCOURING PATTERN

PARKING SUMMARY

LOT 1 - 1501 SHURE DRIVE
PARKING SPACES REQUIRED
ASSUMED 215,927 SF OF OFFICE
1 SPACE PER 300 SF FLOOR AREA = 720 SPACES
102,300 SF MANUFACTURING/SERVICE
1 SPACE PER 2 EMPLOYEES PLUS 1
SPACE FOR EACH VEHICLE USED IN
THE CONDUCT OF THE ENTERPRISE
(ASSUMED 100 EMPLOYEES) = 50 SPACES
TOTAL PARKING REQUIRED = 770 SPACES
PARKING SPACES PROVIDED = 792 SPACES
ACCESSIBLE PARKING SPACES REQUIRED
(2% OF TOTAL SPACES) = 16 SPACES
ACCESSIBLE PARKING SPACES PROVIDED = TBD
LOT 2 - 1421 SHURE DRIVE
PARKING SPACES REQUIRED
1 SPACE PER 300 SF FLOOR AREA = 698 SPACES
PARKING SPACES PROVIDED = 1,743 SPACES (8.33)
ACCESSIBLE PARKING SPACES REQUIRED
(2% + 1 FOR EACH 100 OVER 1,000) = 27 SPACES
ACCESSIBLE PARKING SPACES PROVIDED = 27 SPACES



Kimley»Horn
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE ROAD, SUITE 350,
NORTH ARLINGTON, IL 60064
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: LEN
DRAWN BY: LEN
CHECKED BY: DMA

TORBURN
PARTNERS
1033 SKOKIE BOULEVARD,
SUITE 150
NORTHBROOK, IL 60062

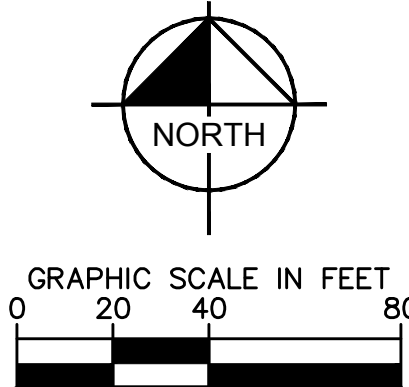
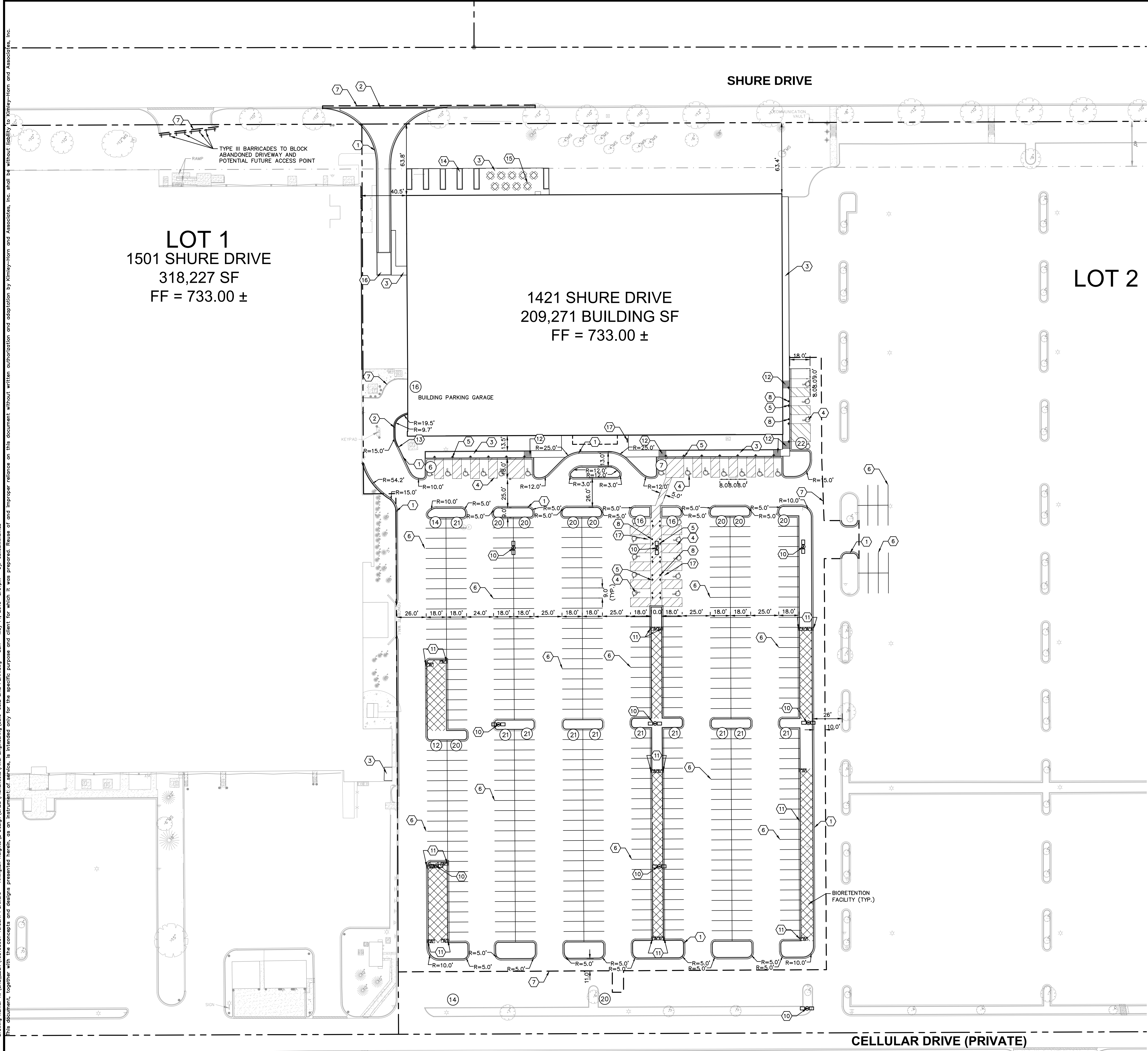
OVERALL SITE
PLAN

NORTHWEST
CROSSINGS
1421 W. SHURE DRIVE
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE:
5/14/2015
KHA PROJECT NO.
168193001
SHEET NUMBER

C3.0

Drawing name: K:\GIS_DEVELOPMENT\168193001 Torburn Partners - Arlington Heights\2 Design\A00\PlanSheets\Final Engineering\C3.0-C3.2 SITE PLAN.dwg C3.1 May 14, 2015 8:31pm By: colleen.thomas
This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



PARKING SUMMARY

LOT 2 - 1421 SHURE DRIVE	
PARKING SPACES REQUIRED	= 698 SPACES
1" SPACE PER 300 SF FLOOR AREA	= 1,743 SPACES (8.33)
PARKING SPACES PROVIDED	
ACCESSIBLE PARKING SPACES REQUIRED	= 27 SPACES
(20 + 1 FOR EACH 100 OVER 1,000)	
ACCESSIBLE PARKING SPACES PROVIDED	= 27 SPACES

GENERAL NOTES

- ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
- RADIi ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3'-FEET, TYPICAL.
- ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

KEY NOTES

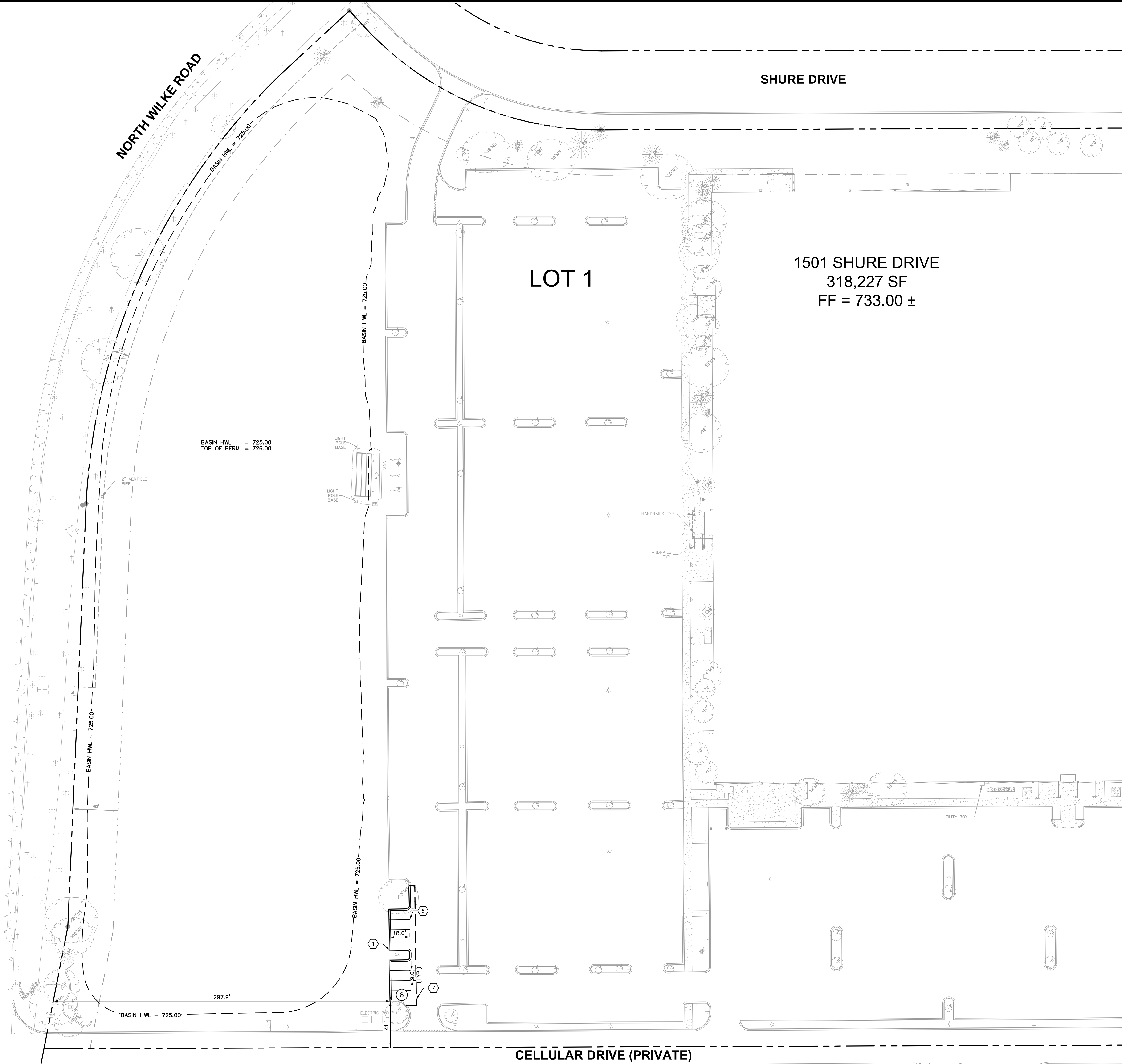
- B6.12 CONCRETE CURB AND GUTTER, TYP. (SEE DETAILS)
- DEPRESSED CURB AND GUTTER
- CONCRETE SIDEWALK, TYP. (SEE DETAILS)
- ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
- ACCESSIBLE PARKING SIGN, TYP. (MUTCD R7-8, SEE DETAILS)
- 4" WIDE PAINTED WHITE SOLID LINE, TYP.
- CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
- PARKING STALL BOLLARD, TYP. (SEE DETAILS)
- MONUMENT SIGN (NOT USED)
- LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE SITE LIGHTING PLANS)
- 3'-FT CURB OPENING (SEE GRADING PLAN & DETAILS)
- ACCESSIBLE RAMP (SEE DETAILS)
- 1'-FT TRANSITION CURB
- PLANTER BOX (SEE ARCHITECTURAL PLAN FOR DETAILS)
- PATIO FURNITURE (SEE ARCHITECTURAL PLAN FOR DETAILS)
- DELIVERY PAD (SEE ARCHITECTURAL PLAN FOR DETAILS)
- BIKE RACK (SEE DETAILS)

CURB LEGEND

	STANDARD PITCH CONCRETE CURB AND GUTTER
	REVERSE PITCH CONCRETE CURB AND GUTTER
	CONCRETE DEPRESSED CURB AND GUTTER
	BIORETENTION FACILITY

NORTHWEST CROSSINGS 1421 W. SHURE DRIVE ARLINGTON HEIGHTS, IL 60004	SITE PLAN - EAST	TORBURN PARTNERS 1033 SKOKIE BOULEVARD, SUITE 150 NORTHBROOK, IL 60062	Kimley»Horn © 2015 KIMLEY-HORN AND ASSOCIATES, INC. 1001 WARRENVILLE ROAD, SUITE 350, LISLE, IL 60532 WWW.KIMLEY-HORN.COM	REVISIONS		DATE	BY
				No.			
ORIGINAL ISSUE: 5/14/2015		KHA PROJECT NO. 168193001		SHEET NUMBER		C3.1	

Drawing name: K:\GIS_LDE\168193001 Torburn Partners - Arlington Heights\2 Design\CADD\PlanSheets\Final Engineering\C3.0-C3.2 SITE PLAN.dwg C3.2 May 14, 2015 7:40pm by colleen.thomas
This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



Call
Before
You Dig

Julie

1-800-892-0123

NORTH

0204080

GRAPHIC SCALE IN FEET

PARKING SUMMARY	
LOT 1 - 1501 SHURE DRIVE	
PARKING SPACES REQUIRED	
ASSUMED 215,927 SF OF OFFICE	
1 SPACE PER 300 SF FLOOR AREA	= 720 SPACES
102,300 SF MANUFACTURING/SERVICE	
1 SPACE PER 2 EMPLOYEES PLUS 1	
SPACE FOR EACH VEHICLE USED IN	
THE CONDUCT OF THE ENTERPRISE	
(ASSUMED 100 EMPLOYEES)	= 50 SPACES
TOTAL PARKING REQUIRED	= 770 SPACES
PARKING SPACES PROVIDED	= 792 SPACES
ACCESSIBLE PARKING SPACES REQUIRED	
(2% OF TOTAL SPACES)	= 16 SPACES
ACCESSIBLE PARKING SPACES PROVIDED	= TBD

GENERAL NOTES	
1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.	
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.	
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.	
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3-FEET, TYPICAL.	
5. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.	

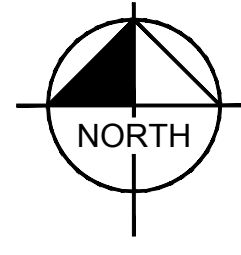
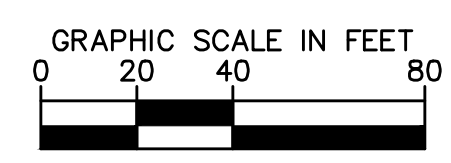
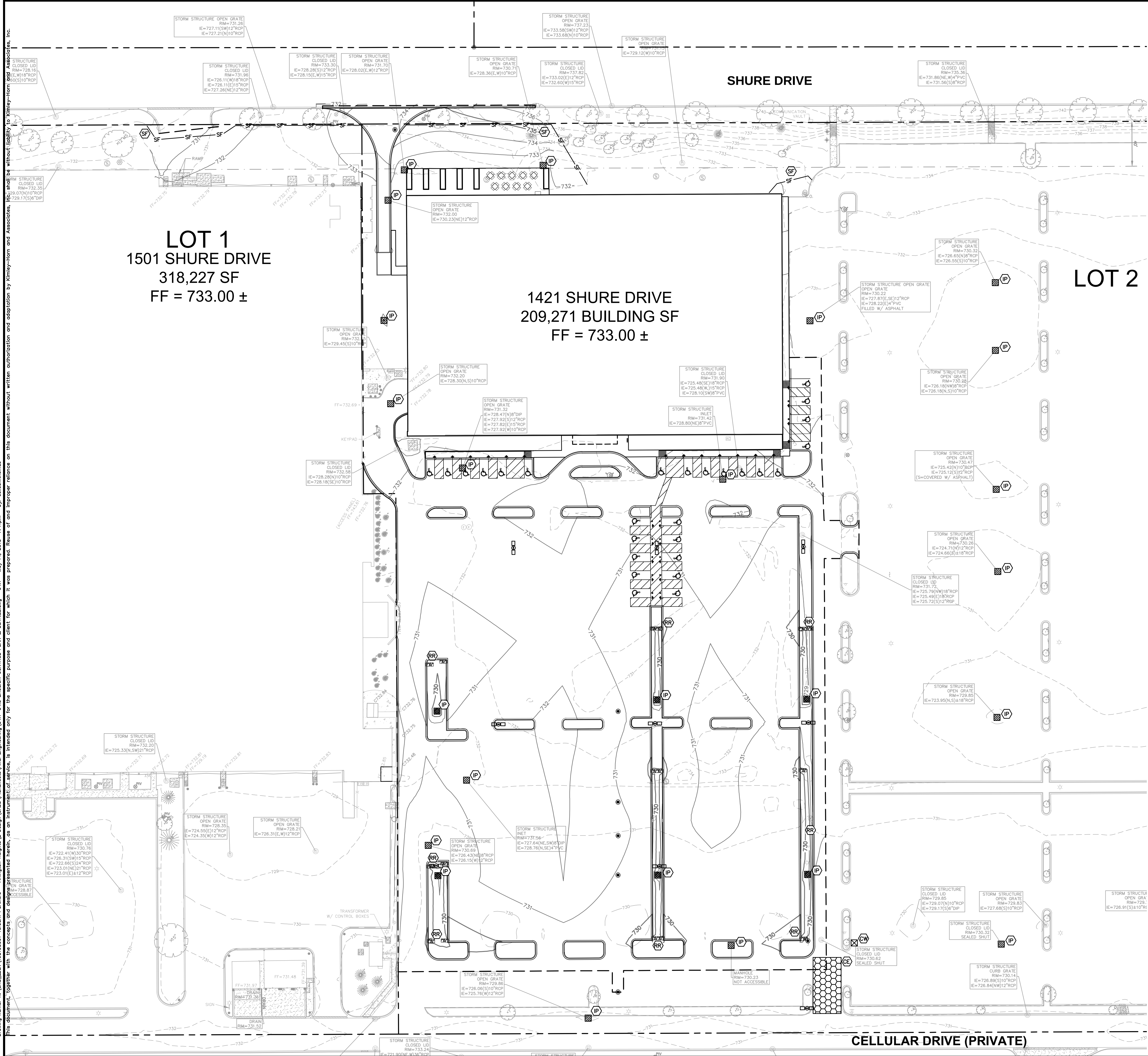
KEY NOTES	
1	B6.12 CONCRETE CURB AND GUTTER, TYP. (SEE DETAILS)
2	DEPRESSED CURB AND GUTTER
3	CONCRETE SIDEWALK, TYP. (SEE DETAILS)
4	ACCESSIBLE PAVEMENT MARKINGS, TYP. (SEE DETAILS)
5	ACCESSIBLE PARKING SIGN, TYP. (MUTCD R7-8, SEE DETAILS)
6	4" WIDE PAINTED WHITE SOLID LINE, TYP.
7	CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
8	PARKING STALL BOLLARD, TYP. (SEE DETAILS)
9	MONUMENT SIGN (NOT USED)
10	LIGHT POLES SHOWN FOR COORDINATION ONLY (SEE SITE LIGHTING PLANS)
11	3-FT CURB OPENING (SEE GRADING PLAN & DETAILS)
12	ACCESSIBLE RAMP (SEE DETAILS)
13	1-FT TRANSITION CURB
14	PLANTER BOX (SEE ARCHITECTURAL PLAN FOR DETAILS)
15	PATIO FURNITURE (SEE ARCHITECTURAL PLAN FOR DETAILS)
16	DELIVERY PAD (SEE ARCHITECTURAL PLAN FOR DETAILS)
17	BIKE RACK (SEE DETAILS)

CURB LEGEND	
	STANDARD PITCH CONCRETE CURB AND GUTTER
	REVERSE PITCH CONCRETE CURB AND GUTTER
	CONCRETE DEPRESSED CURB AND GUTTER
	BIORETENTION FACILITY

NORTHWEST CROSSINGS 1421 W. SHURE DRIVE ARLINGTON HEIGHTS, IL 60004	SITE PLAN - WEST	TORBURN PARTNERS 1033 SKOKIE BOULEVARD, SUITE 150 NORTHBROOK, IL 60062	Kimley»Horn © 2015 KIMLEY-HORN AND ASSOCIATES, INC. 1001 WARENVILLE ROAD, SUITE 350, Lisle, IL 60532-4550 WWW.KIMLEY-HORN.COM	No.	REVISIONS	DATE	BY
ORIGINAL ISSUE: 5/14/2015		KHA PROJECT NO. 168193001		SHEET NUMBER		C3.2	

Drawing name: K:\GIS_DEVELOPMENT\168193001 Torburn Partners - Arlington Heights\2 Design\CAD\PlanSheets\Final Engineering\C4.1-C4.3 EROSION CONTROL PLAN & DETAILS.dwg C4.1 May 14, 2015 7:41pm by: collen.hanna

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



EROSION CONTROL LEGEND

	CONSTRUCTION ENTRANCE (SEE EROSION CONTROL DETAILS)
	SILT FENCE (SEE EROSION CONTROL DETAILS)
	INLET PROTECTION (SEE EROSION CONTROL DETAILS)
	CONCRETE WASHOUT (SEE EROSION CONTROL DETAILS) (TO BE DETERMINED BY CONTRACTOR)
	RIP RAP (SEE EROSION CONTROL DETAILS)
	FLARED END SECTION PROTECTION (SEE EROSION CONTROL DETAILS)
	TEMPORARY SOIL STOCKPILE
	EXISTING CONTOURS
	PROPOSED CONTOURS

EROSION CONTROL SCHEDULE AND SEQUENCING:

I. ROUGH GRADING	CONSTRUCTION ENTRANCE/EXIT, SILT FENCE PROTECTION, CONCRETE WASHOUT AREA AND TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE INITIATION OF ROUGH GRADING, AS NEEDED. TEMPORARY EROSION CONTROL MEASURES TO BE INSTALLED UPON COMPLETION OF ROUGH GRADING AND AS NECESSARY THROUGHOUT CONSTRUCTION.
II. UTILITY INSTALLATION	ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING UTILITY INSTALLATION. STORM STRUCTURE INLET PROTECTION SHALL BE INSTALLED AS STORM DRAINAGE SYSTEM IS CONSTRUCTED.
III. PAVING	ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING PAVING AND THROUGHOUT THE REMAINDER OF THE PROJECT.
IV. FINAL GRADING/SOIL STABILIZATION/LANDSCAPING	ALL TEMPORARY EROSION CONTROL MEASURES TO BE REMOVED AT THE CONCLUSION OF THE PROJECT AS DIRECTED BY THE LOCAL MUNICIPALITY.

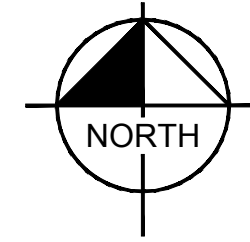
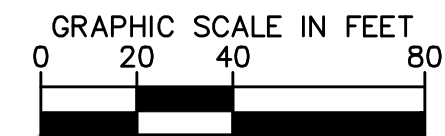
TORBURN PARTNERS 1033 SKOKIE BOULEVARD, SUITE 150 NORTHBROOK, IL 60062		EROSION CONTROL PLAN - EAST		NORTHWEST CROSSINGS 1421 W. SHURE DRIVE ARLINGTON HEIGHTS, IL 60004	
SCALE:	AS NOTED	DESIGNED BY: LEN	DRAWN BY: LEN	CHECKED BY: DWA	BY: DATE
REVISIONS					
No.					
Kimley»Horn © 2015 KIMLEY-HORN AND ASSOCIATES, INC. 1001 WARRENVILLE ROAD, SUITE 350, Lisle, IL 60532 TEL: 630.327.4550 WWW.KIMLEY-HORN.COM					
ORIGINAL ISSUE: 5/14/2015 KHA PROJECT NO. 168193001 SHEET NUMBER C4.1					



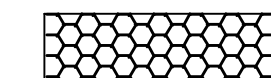
LOT 1

1501 SHURE DRIVE
318,227 SF
FF = 733.00 ±

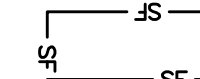
CELLULAR DRIVE (PRIVATE)



EROSION CONTROL LEGEND



_____SF_____



CONSTRUCTION ENTRANCE
(SEE EROSION CONTROL DETAILS)

SILT FENCE
 (SEE EROSION CONTROL DETAILS)

INLET PROTECTION
(SEE EROSION CONTROL DETAILS)

CONCRETE WASHOUT
(SEE EROSION CONTROL DETAILS)

A. RIP RAP

FLARED END SECTION PROTECTION

/ (SEE EROSION CONTROL DETAILS.)

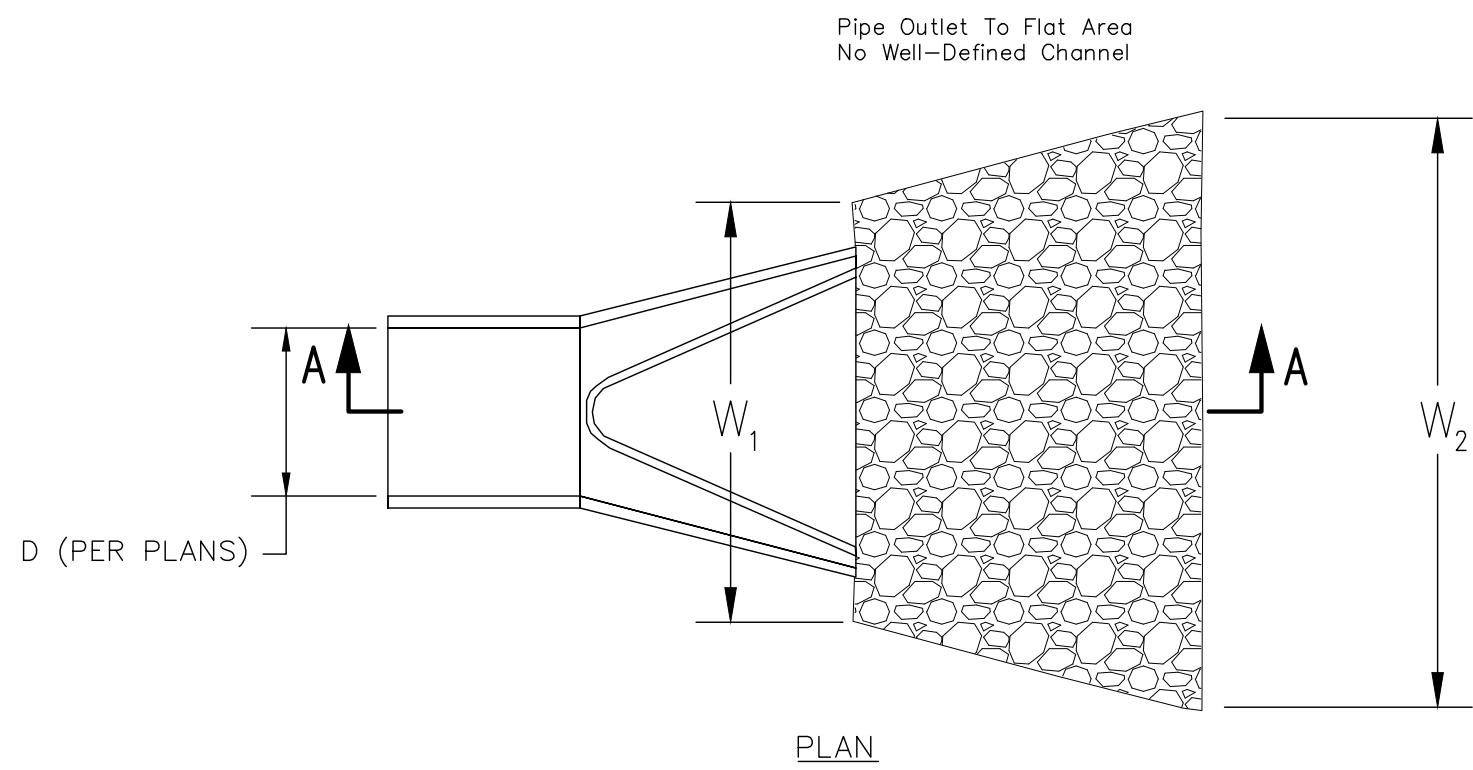
TEMPORARY SOIL STOCKPILE

EROSION CONTROL SCHEDULE AND SEQUENCING:

- | | |
|--|--|
| I. ROUGH GRADING | CONSTRUCTION ENTRANCE/EXIT, SILT FENCE PROTECTION, CONCRETE WASHOUT AREA AND TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE INITIATION OF ROUGH GRADING. AS NECESSARY TEMPORARY EROSION CONTROL MEASURES TO BE INSTALLED UPON COMPLETION OF ROUGH GRADING AND AS NECESSARY THROUGHOUT CONSTRUCTION. |
| II. UTILITY INSTALLATION | ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING UTILITY INSTALLATION. STORM STRUCTURE INLET PROTECTION SHALL BE INSTALLED AS STORM DRAINAGE SYSTEM IS CONSTRUCTED. |
| III. PAVING | ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING PAVING AND THROUGHOUT THE REMAINDER OF THE PROJECT. |
| IV. FINAL GRADING/SOIL STABILIZATION/LANDSCAPING | ALL TEMPORARY EROSION CONTROL MEASURES TO BE MAINTAINED AT THE CONCLUSION OF THE PROJECT AS DIRECTED BY THE LOCAL MUNICIPALITY. |

NORTHWEST CROSSINGS 1421 W. SHURE DRIVE ARLINGTON HEIGHTS, IL 60004		EROSION CONTROL PLAN - WEST		TORBURN PARTNERS 1033 SKOKIE BOULEVARD, SUITE 150 NORTHBROOK, IL 60062		Kimley»Horn © 2016 KIMLEY-HORN AND ASSOCIATES, INC. 1001 WARRENVILLE ROAD, SUITE 350, NORTHBROOK, IL 60062 PHONE: 630-487-5550 WWW.KIMLEY-HORN.COM		SCALE: AS NOTED DESIGNED BY: LEN DRAWN BY: LEN CHECKED BY: DMA		NO. _____ DATE _____ BY _____	
ORIGINAL ISSUE: 5/14/2015		KHA PROJECT NO. 168193001		SHEET NUMBER		C4.2					

Drawing name: K:\GIS_DEVELOPMENT\168193001 Torburn Partners - Arlington Heights\2 Design\CADD\PlanSheets\Final Engineering\C4.3--C4.3 EROSION CONTROL PLAN & DETAILS.dwg C4.3 May 14, 2015 7:41pm by: collen.homas
This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



- NOTES:
- The rock riprap shall meet IDOT requirements for Gradation No. RR-3 & RR-4, Quality Designation "A".
 - Geotextile (non-woven) minimum criteria:
 - Weight of Geotextile (oz/sq.yd.) _____ 6
 - Tensile strength (lb) ASTM D 4632 _____ 180
 - Elongation at failure (%) ASTM D 4632 _____ ≥50
 - Puncture (lb) ASTM D 4833 _____ 80
 - Ultraviolet light (% residual tensile strength) ASTM D 4355 _____ min 70
 - Apparent opening size (AOS) ASTM D 4751 _____ max 40 sieve
 - Permittivity sec⁻¹ ASTM D 4491 _____ min 0.70
 - Any geotextile splices shall overlap a minimum of 18 inches, with upstream or upslope geotextile overlapping the abutting downslope geotextile.
 - Apron width W₁ shall be 3 times the culvert pipe diameter. Apron width W₂ shall be equal to L_a plus the pipe diameter.
 - Rock thickness d shall be at least 1.5 times the riprap D₁₀₀ size.
 - Apron length L_a and rock riprap has been sized according to Illinois Urban Manual Rock Outlet Protection standard 910 based calculated velocity for this project site. Please see Table 1 for details.

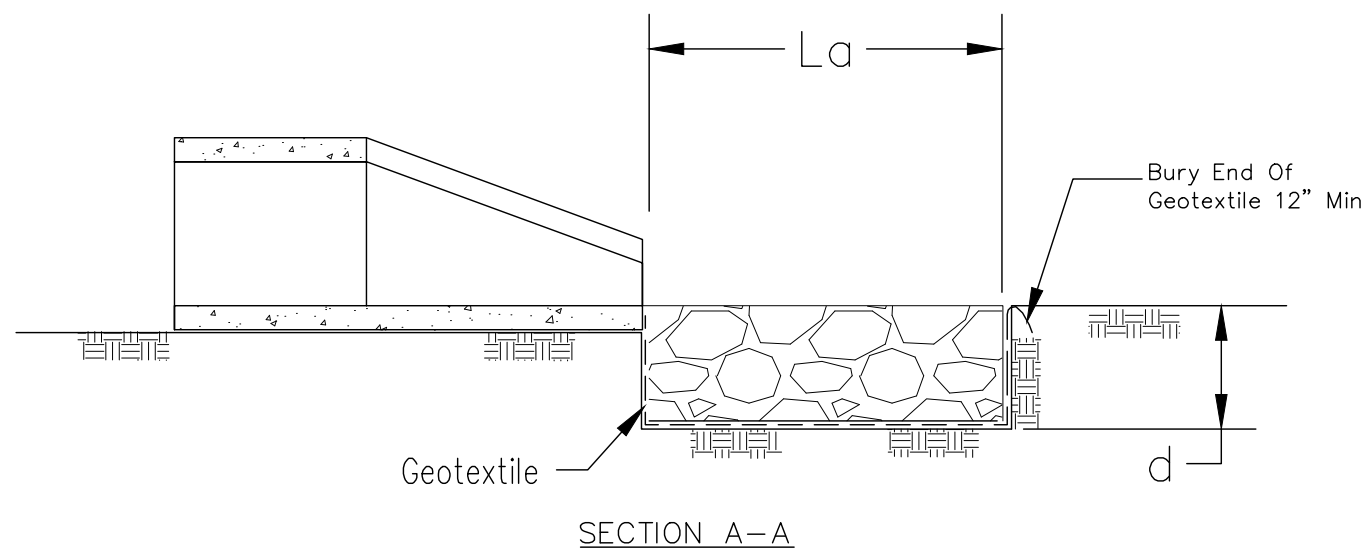
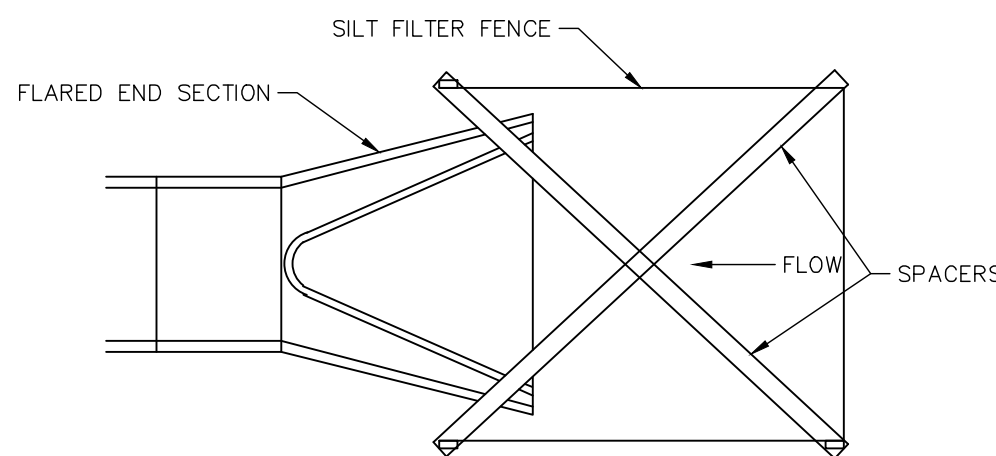
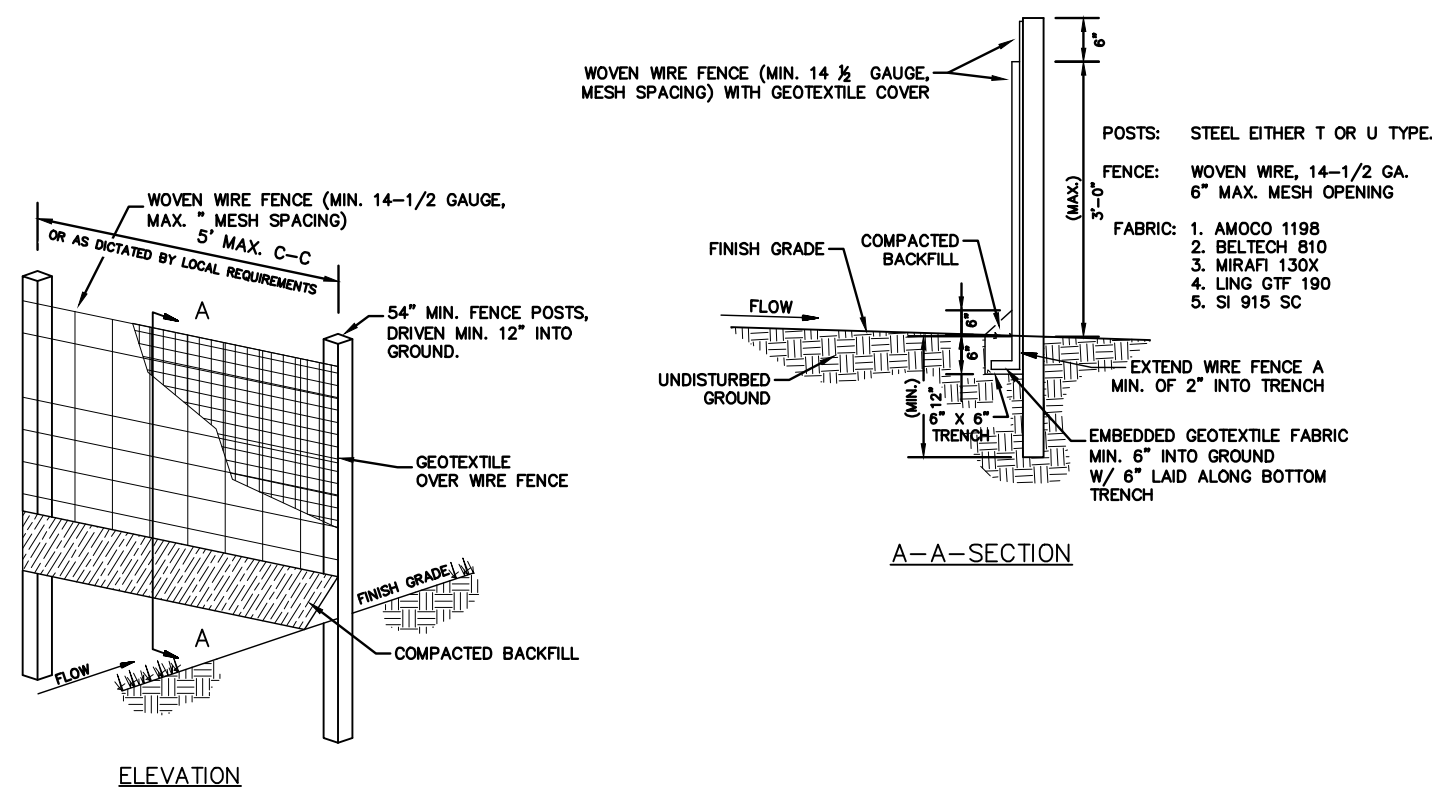


TABLE 1		
PIPE SIZE	IDOT GRADATION	L _a
12"	RR-3	12'
24"	RR-4	14'
36"	RR-4	22'

RIP RAP DETAIL OUTLET PROTECTION
N.T.S.

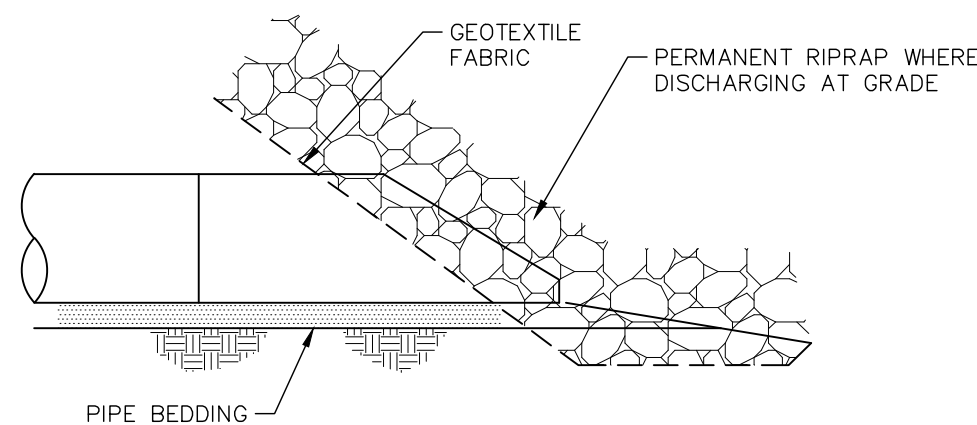


CULVERT INLET PROTECTION
N.T.S.



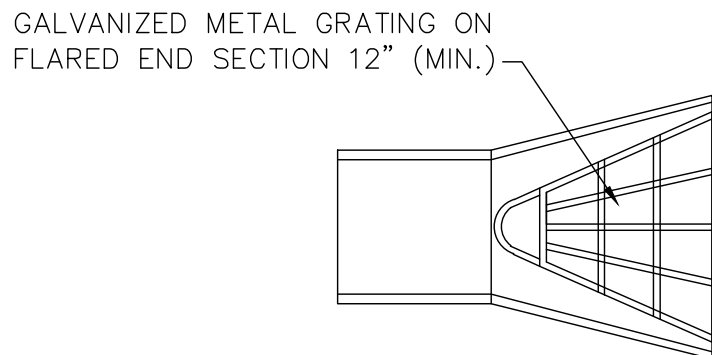
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
- GEOTEXTILE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF GEOTEXTILE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS INDICATED OTHERWISE

SEDIMENTATION/SILT FENCE
WITH WIRE SUPPORT
N.T.S.

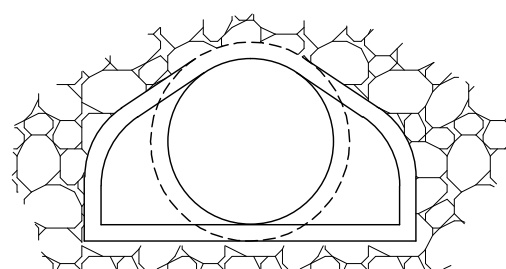


PROFILE VIEW

NOTE: PROVIDE GRATED COVER PER IDOT STANDARD DETAIL 542311-04.

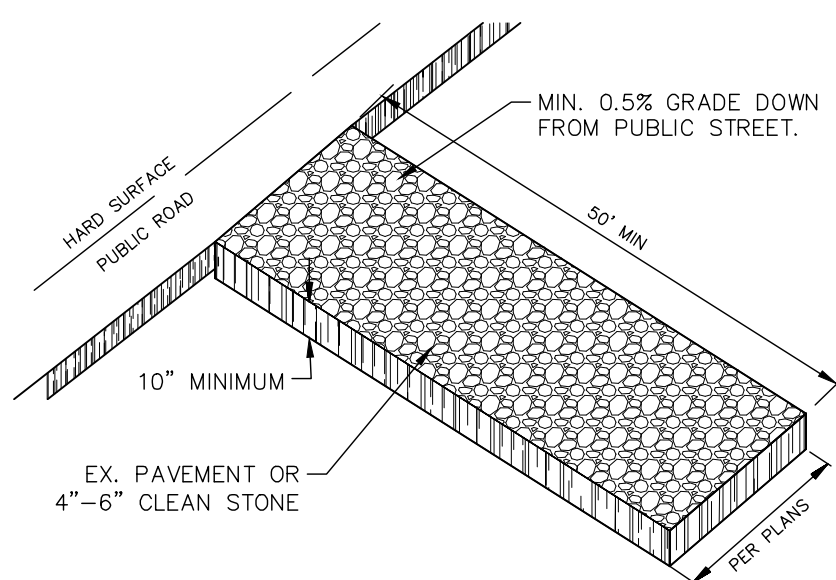


PLAN VIEW

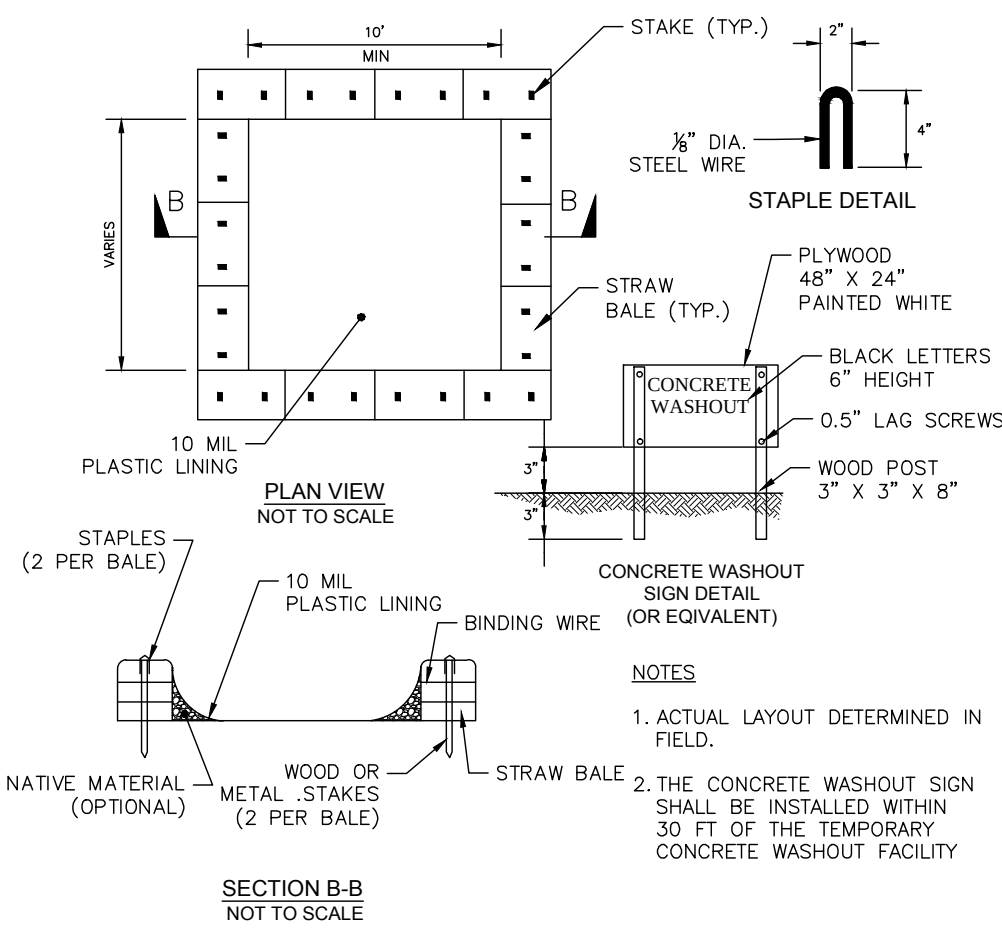


END VIEW

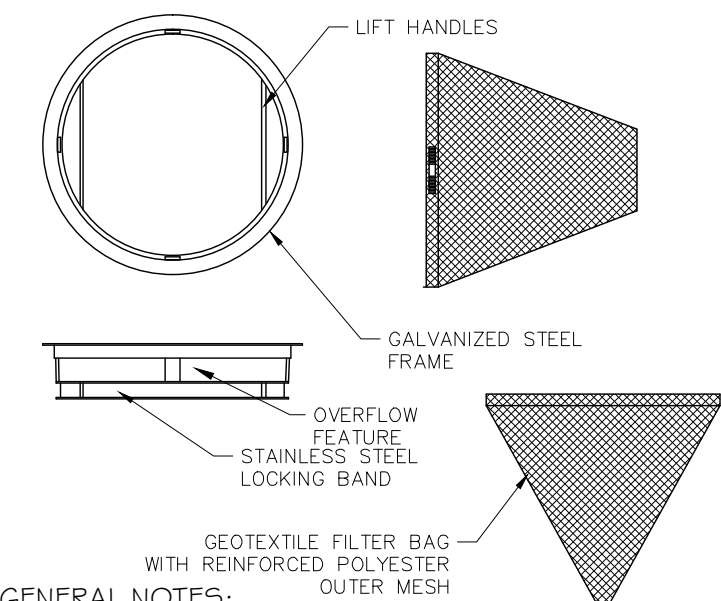
FLARED END SECTION
N.T.S.



CONSTRUCTION ENTRANCE
N.T.S.



CONCRETE WASHOUT
N.T.S.



GENERAL NOTES:

ALL PRODUCTS MANUFACTURED BY INLET AND PIPE PROTECTION, INC OR APPROVED EQUAL.

NOTE: INLET FILTERS ARE SLIGHTLY SMALLER THAN THE INLET GRATE SIZES. WHEN IDENTIFYING OR SPECIFYING FILTERS/CASTINGS PLEASE REFER TO THE DIAMETER "D" OR WIDTH "W" AND HEIGHT "H" OF FILTER FRAMES OR CASTING GRATES. YOU MAY ALSO REFER TO OUR CASTING CROSS REFERENCE GUIDE FOR IDOT STANDARDS

IDOT TYPE 1 ROUND INLET FILTER DEPICTED

NOTE: ROUND AND SQUARE INLET FILTERS AVAILABLE FOR MOST NEENAH AND EAST JORDAN BEEHIVE, ROLL CURB AND CURB BOX FRAME TYPES

ALL IPP INLET FILTERS TO CONFORM TO IDOT SPECIFICATIONS AS OUTLINED IN ARTICLE 1081.15 OF IDOT'S STANDARD SPECIFICATIONS GUIDE.

INLET PROTECTION
N.T.S.

EROSION CONTROL NOTES

SITE GENERAL NOTES

- CONSTRUCTION ENTRANCE SHALL BE LOCATED SO AS TO PROVIDE THE LEAST AMOUNT OF DISTURBANCE TO THE FLOW OF TRAFFIC IN AND OUT OF THE SITE. ADDITIONALLY, CONSTRUCTION ENTRANCE SHALL BE LOCATED TO COINCIDE WITH THE PHASING OF THE PAVEMENT REPLACEMENT.
- POST CONSTRUCTION STORM WATER POLLUTION CONTROL MEASURES INCLUDE STABILIZATION BY PERMANENT PAVING, DRAINAGE SYSTEM STRUCTURE, OR LANDSCAPING.
- TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.
- BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE: SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF.

TEMPORARY EROSION CONTROL NOTES

- THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
- ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST, OR ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY THE PLANNING AND DEVELOPMENT DEPARTMENT AND THE DRAINAGE UTILITY DEPARTMENT. MINOR CHANGES OR ADDITIONAL CONTROL MEASURES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL PLACE EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL) ON ALL SITE AREAS WITH SLOPES GREATER THAN 4:1, AND IN THE BOTTOM AND SIDE SLOPES OF ALL SWALES.
- PRIOR TO FINAL ACCEPTANCE, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
- PERMANENT, FINAL PLANT COVERING OR STRUCTURES SHALL BE INSTALLED PRIOR TO FINAL ACCEPTANCE.
- ALL CONTROL DEVICES THAT FUNCTION SIMILARLY TO SILT FENCE OR FIBER ROLLS MUST BE REPAIRED, REPLACED OR SUPPLEMENTED WITH EFFECTIVE CONTROLS WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ONE-THIRD THE HEIGHT OF THE DEVICE. THESE REPAIRS MUST BE MADE WITHIN 24 HOURS OF THE RAINFALL EVENT OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
- ALL SEDIMENT DELTAS AND DEPOSITS MUST BE REMOVED FROM SURFACE WATERS, DRAINAGE WAYS, CATCH BASINS AND OTHER DRAINAGE SYSTEMS. ALL AREAS WHERE SEDIMENT REMOVAL RESULTED IN EXPOSED SOIL MUST BE RESTABILIZED. THE REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS AFTER THE RAINFALL EVENT UNLESS PRECULIDATED BY LEGAL, REGULATORY OR PHYSICAL ACCESS CONSTRAINTS. ALL REASONABLE EFFORTS MUST BE USED TO OBTAIN ACCESS. ONCE ACCESS IS OBTAINED, REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS LATER. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL APPROPRIATE AUTHORITIES AND RECEIVING THE APPLICABLE PERMITS PRIOR TO CONDUCTING ANY WORK.
- ACCUMULATIONS OF TRACKED AND DEPOSITED SEDIMENT MUST BE REMOVED FROM OFF-SITE PAVED SURFACES WITHIN 24 HOURS OR SOONER IF REQUIRED. SEDIMENT TRACKING MUST BE MINIMIZED BY THE APPROPRIATE MANAGEMENT PRACTICE, LIKE A DEDICATED SITE EXIT WITHIN THE DESIGNATED OFFSITE PARKING AREA. CONTRACTOR IS RESPONSIBLE FOR STREET SWEEPING AND/OR SCRAPING IF YOUR PRACTICES ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED FROM THE SITE.
- SURFACE WATERS, DRAINAGE DITCHES AND CONVEYANCE SYSTEMS MUST BE INSPECTED FOR SEDIMENT DEPOSITS.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES AS INDICATED ON THIS SHEET IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS INDICATED IN THE SWPPP INCLUDING EROSION CONTROL MEASURES AND INSPECTION FREQUENCY, AS REQUIRED BY THE IEPA NPDES PHASE II PERMIT PROGRAM REQUIREMENTS.
- PUMPING SEDIMENT LADEN WATER INTO ANY STORMWATER FACILITY THAT IS NOT DESIGNATED TO BE A SEDIMENT TRAP, DRAINAGEWAY, OR OFFSITE AREA EITHER DIRECTLY OR INDIRECTLY WITHOUT FILTRATION IS PROHIBITED.
- SOIL STOCKPILES SHALL NOT BE LOCATED IN A DRAINAGEWAY, FLOOD PLAIN AREA OR A DESIGNATED BUFFER, UNLESS OTHERWISE APPROVED, UNDER SPECIFIC CONDITIONS TO BE ESTABLISHED BY THE DIRECTOR OR ADMINISTRATOR.
- STOCKPILES TO REMAIN IN PLACE FOR MORE THAN THREE DAYS SHALL BE PROVIDED WITH SESC MEASURES. MATERIAL IS TO BE HAULED OFF IMMEDIATELY AND LEGALLY IF NO STOCKPILE IS TO REMAIN IN PLACE.
- ALL TEMPORARY SESC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF PRIOR TO PERMANENT STABILIZATION.
- WATER REMOVED FROM TRAPS, BASINS, AND OTHER WATER HOLDING DEPRESSIONS OR EXCAVATIONS MUST FIRST PASS THROUGH A SEDIMENT CONTROL AND/OR FILTRATION DEVICE. WHEN DEWATERING DEVICES ARE USED, DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION.

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING			A			*	*					
DORMANT SEEDING	B									B		
TEMPORARY SEEDING			C			D						
SODDING			E									
MULCHING	F		**									

- A KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE
- C SPRING OATS 100 LBS/ACRE
- D WHEAT OR CEREAL RYE 150 LBS/ACRE
- E SOD
- F STRAW MULCH 2 TONS/ACRE
- * IRRIGATION NEEDED DURING JUNE AND JULY
- ** IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD

SEEDING CHART

Kimley»Horn
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARENVILLE ROAD, SUITE 350,
Lisle, IL 60532
TEL: 630.582.5550
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: LEN
DRAWN BY: LEN
CHECKED BY: DMA

TORBURN PARTNERS
1033 SKOKIE BOULEVARD,
SUITE 150
NORTHBROOK, IL 60062

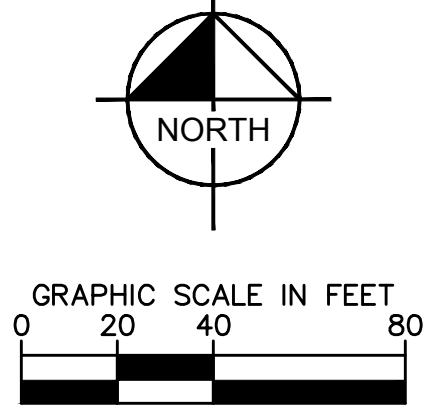
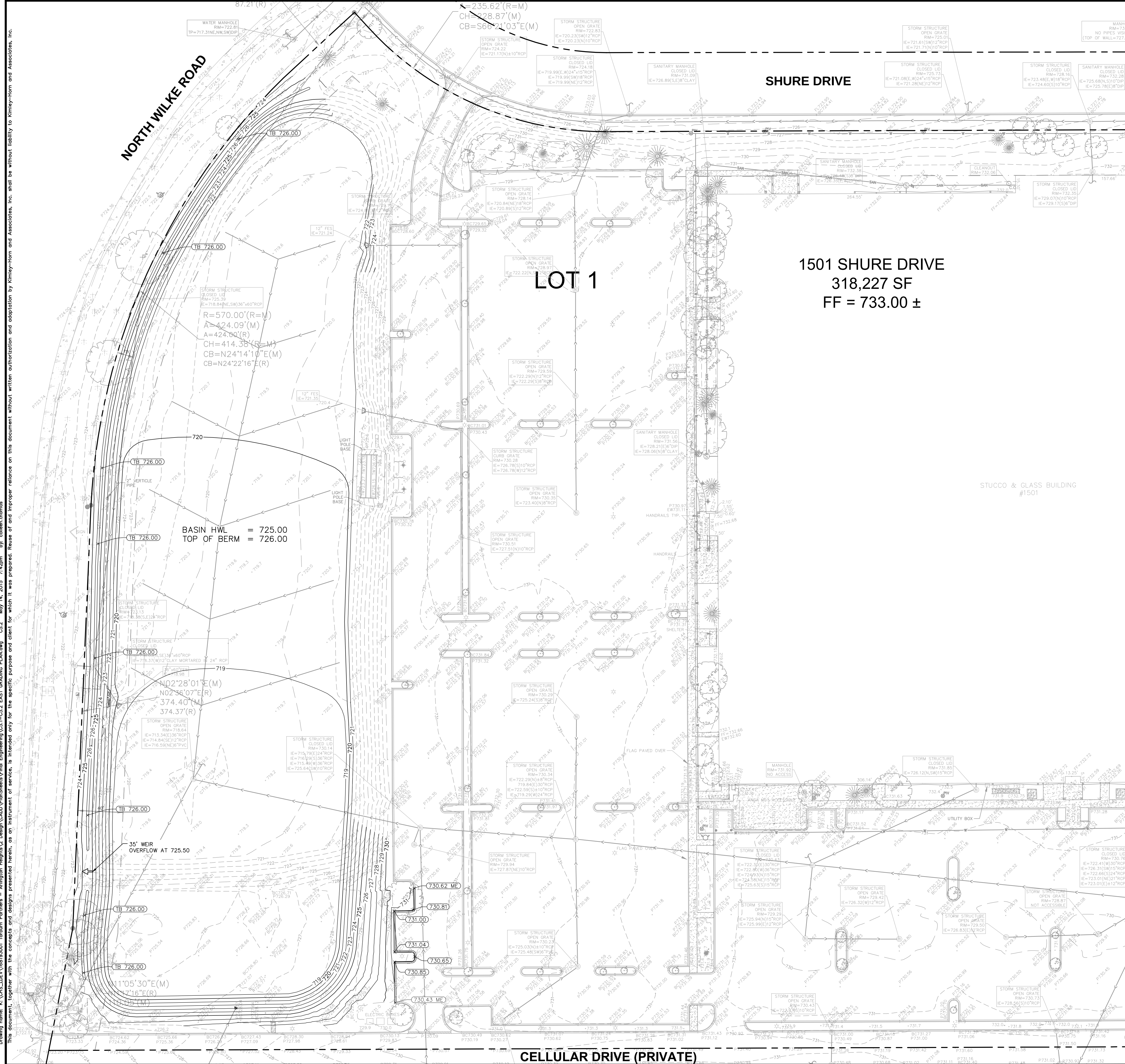
**EROSION CONTROL NOTES
& DETAILS**

NORTHWEST CROSSINGS
1421 W. SHURE DRIVE
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE:
5/14/2015
KHA PROJECT NO.
168193001

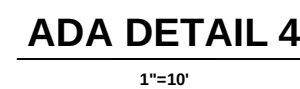
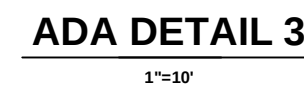
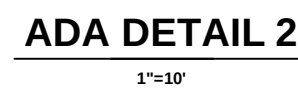
SHEET NUMBER

C4.3



C5.2

Drawing name: K:\CHS_DEV\168193001 Torburn Partners - Arlington Heights\2 Design\CADD\PlanSheets\Final Engineering\C5.1-C5.2 EAST GRADING PLAN.dwg C5.3 May 14, 2015 8:39pm by: colleen.thomas



ORIGINAL ISSUE:
5/14/2015

KHA PROJECT NO
168193001

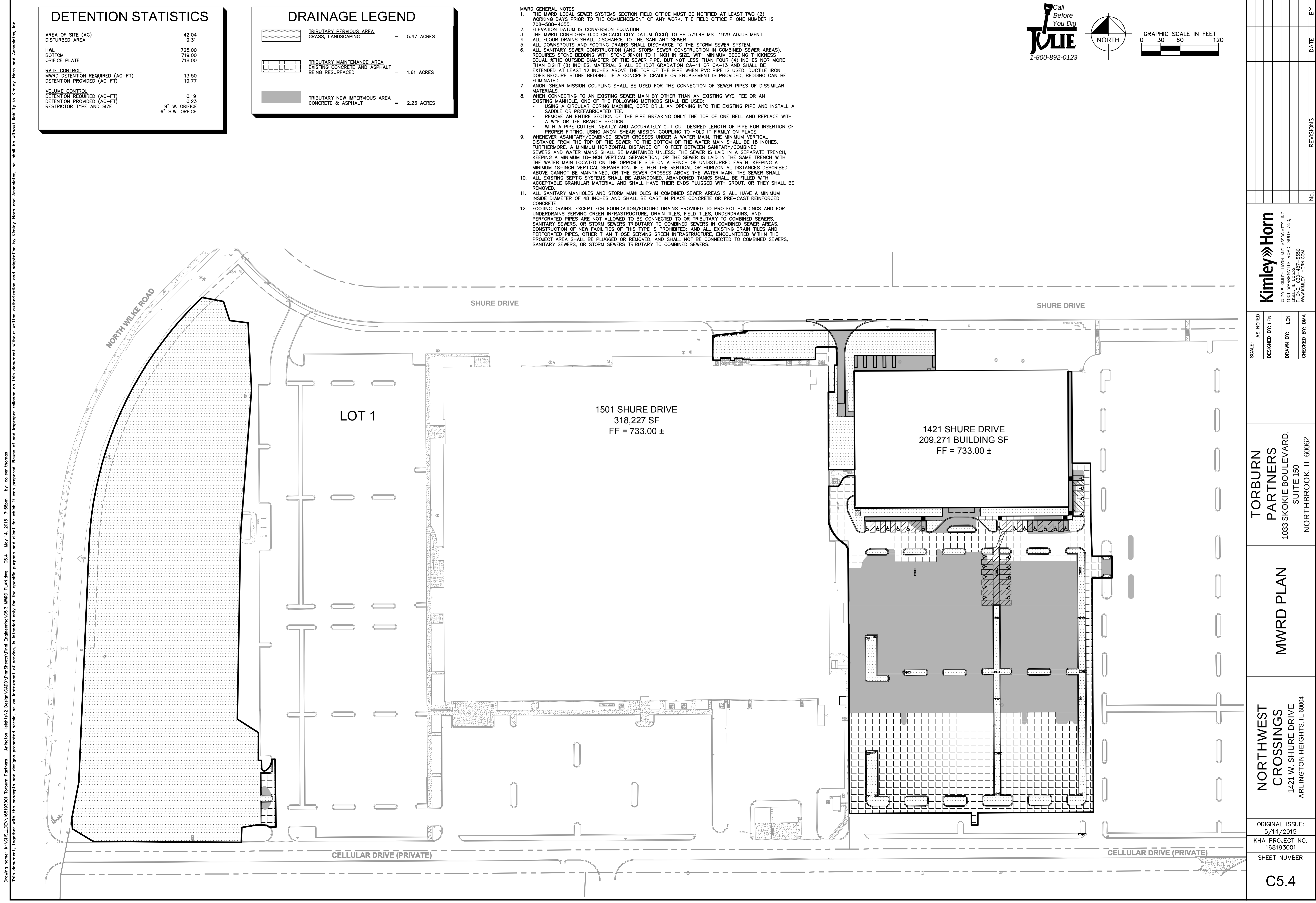
SHEET NUMBER

C5.3

**TORBURN
PARTNERS**
1033 SKOKIE BOULEVARD
SUITE 150
NORTHBROOK, IL 60062

SCALE:	AS NOTED
DESIGNED BY:	LEN
DRAWN BY:	LEN
CHECKED BY:	DMA

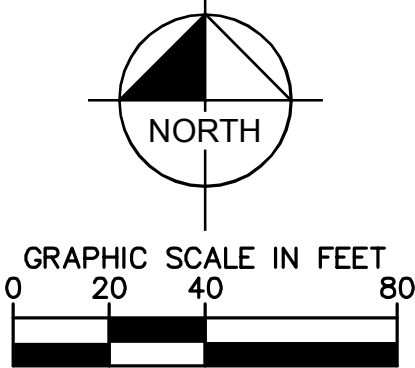
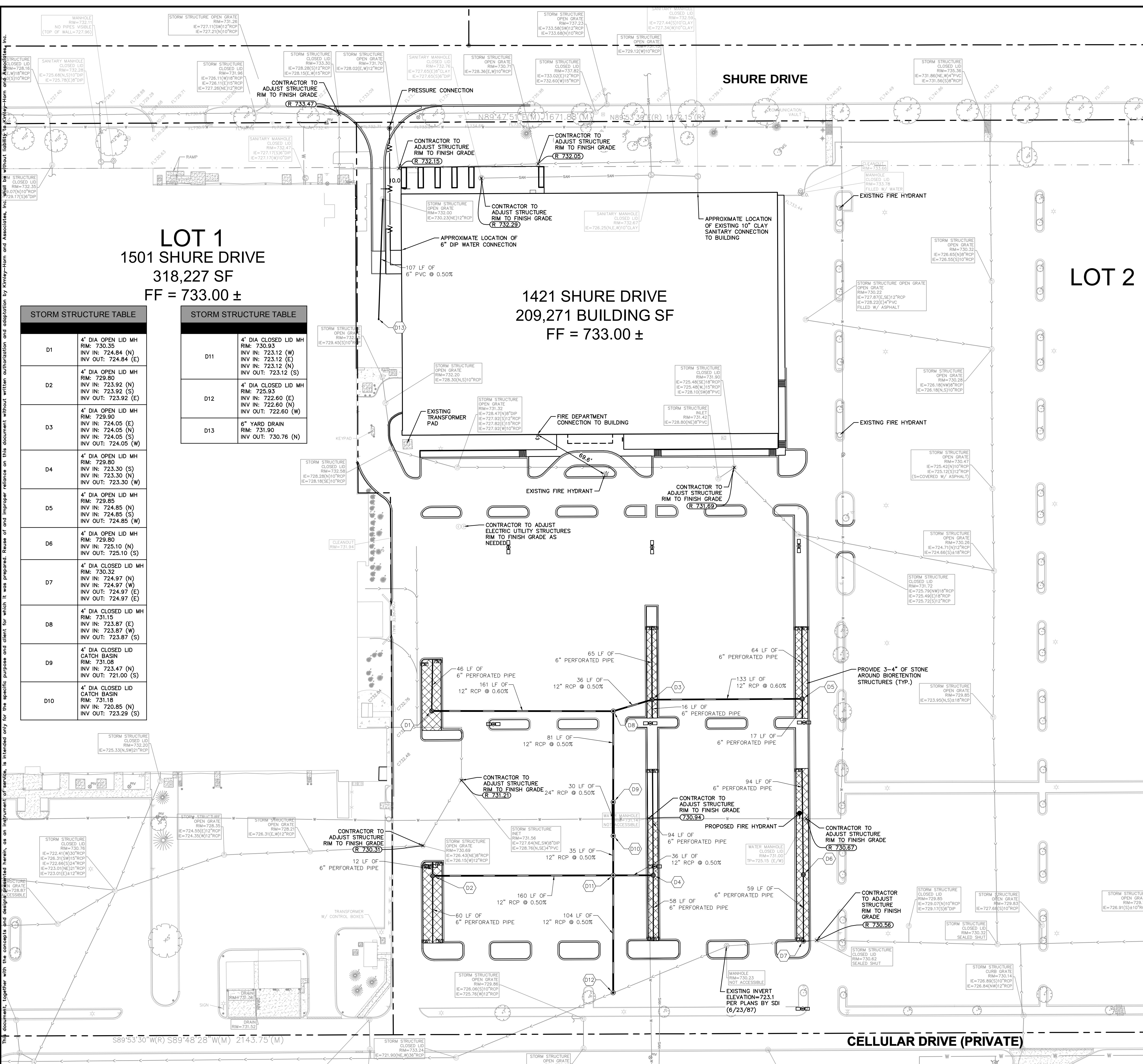
Kimley»Horn
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE ROAD, SUITE 350,
LISLE, IL 60532
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM



Drawing name: K:\GIS\DEV\168193001_Torburn_Partners - Arlington Heights\2_Design_High\2_Design\CADD\PlanSheets\Final_Engineering\C5.3_MWRD_Plan.dwg C5.4 May 14, 2015 7:58pm by: collen.hornas
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

NORTHWEST CROSSINGS 1421 W. SHURE DRIVE ARLINGTON HEIGHTS, IL 60004	MWRD PLAN	TORBURN PARTNERS 1033 SKOKIE BOULEVARD, SUITE 150 NORTHBROOK, IL 60062	SCALE: AS NOTED	Kimley»Horn © 2015 KIMLEY-HORN AND ASSOCIATES, INC. 1001 WARRENVILLE ROAD, SUITE 350, NORTHBROOK, IL 60062 PHONE: 630-487-5550 WWW.KIMLEY-HORN.COM	No.	REVISIONS	DATE	BY
			DESIGNED BY: LEN					
			DRAWN BY: LEN					
			CHECKED BY: DMA					
ORIGINAL ISSUE: 5/14/2015	KHA PROJECT NO. 168193001	SHEET NUMBER	C5.4					

Drawing name: K:\VARS_LDEV\168193001_Torburn Partners - Arlington Heights\2 Design\CADD\PlanSheet\Final Engineering\061-062_UTILITY PLAN.dwg C61 May 18, 2015 10:12am by: lscapator
This document, together with the concepts and designs indicated herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



UTILITY LEGEND

W	EX. WATER LINE
Q	EX. HYDRANT
W	EX. WATER VALVE
SAN	EX. SANITARY SEWER LINE
⊙	EX. SANITARY SEWER MANHOLE
→	EX. SANITARY SEWER CLEANOUT
→	EX. STORM DRAIN LINE
⊙	EX. STORM MANHOLE
⊙	EX. STORM STRUCTURE/INLET
G	EX. GAS LINE
□	EX. GAS METER
—ELEC—	EX. UNDERGROUND ELECTRIC LINE
—TEL—	EX. UNDERGROUND TELEPHONE LINE
*	EX. LIGHT POLE
—ELEC—	PROPOSED UNDERGROUND ELECTRIC LINE
—TEL—	GAS LINE (BY GAS COMPANY)
—TEL—	PROPOSED PHONE LINE
—TEL—	PROPOSED STORM SEWER LINE
⊙	PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
⊙	PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
⊙	PROPOSED OPEN LID CURB STRUCTURE (B6.12 C&G USE NEENAH R-3281-A)
→	PROPOSED SANITARY SEWER LINE
→	PROPOSED SANITARY MANHOLE
→	PROPOSED STORM/SANITARY CLEANOUT
→	PROPOSED WATER LINE
⊙	PROPOSED VALVE VAULT
→	PROPOSED FIRE DEPARTMENT CONNECTION
⬢	PROPOSED FIRE HYDRANT
□	PROPOSED LIGHT POLE

UTILITY NOTES

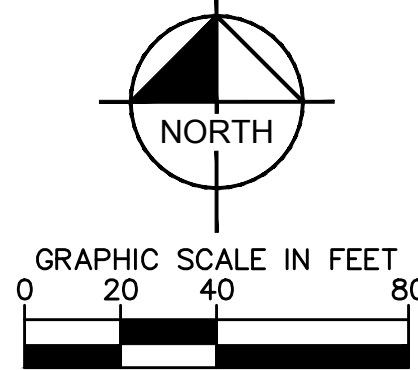
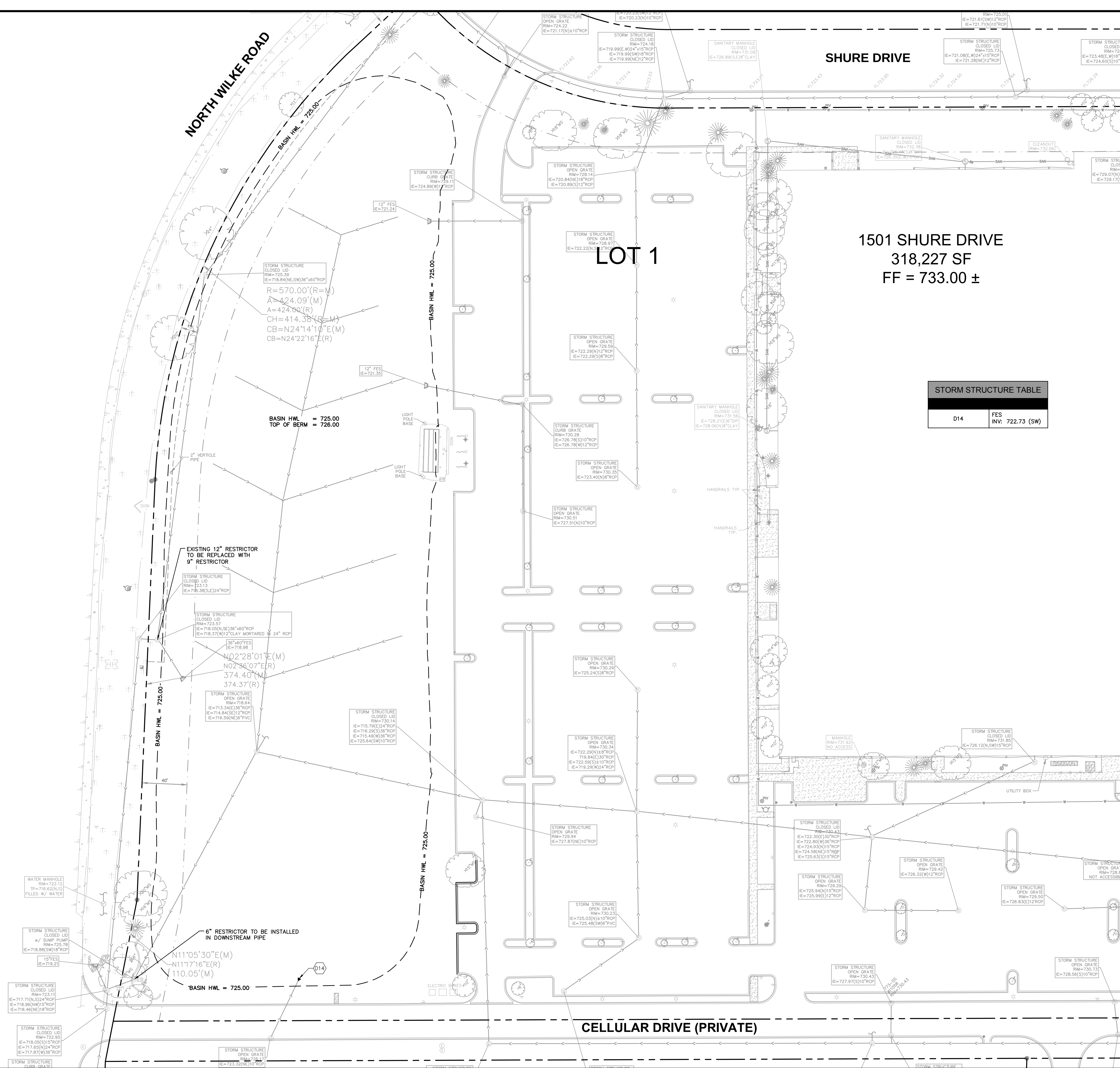
- ALL WATER LINES SHALL BE DUCTILE IRON PIPE, CLASS 52.
- CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
- ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
- CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE GOVERNING AUTHORITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.
- CONTRACTOR TO CALL "JULIE" (1-800-892-0123) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
- PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE MUNICIPALITY SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
- CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED TO ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
- CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS DURING INSTALLATION OF UTILITIES.
- ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
- SEE ARCHITECTURAL AND MEP PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
- LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
- SEE DETAILS FOR LOCATING STORM STRUCTURES WITHIN THE CURB LINE.
- STORMWATER FACILITIES MUST BE FUNCTIONAL BEFORE BUILDING CONSTRUCTION BEGINS.

UTILITY CROSSING LEGEND

8" EX. WATER	B/P = 724.89
24" STORM	T/P = 723.18

NOTE: WATER MAIN QUALITY PIPE IS TO BE USED TO CONSTRUCT SEWER MAIN OR WATER MAIN IS TO BE ENCASED FOR 10-FT ON EACH SIDE OF A CROSSING WHERE THERE IS LESS THAN 18-IN SEPARATION.

BY	
DATE	
REVISIONS	
No.	
Kimley»Horn	
© 2015 KIMLEY-HORN AND ASSOCIATES, INC. 1001 WARRENVILLE ROAD, SUITE 350, NORTH ARLINGTON, IL 60064 PHONE: 630-487-5550 WWW.KIMLEY-HORN.COM	
SCALE: AS NOTED	CHECKED BY: DMA
DESIGNED BY: LEN	DRAWN BY: LEN
TORBURN PARTNERS 1033 SKOKIE BOULEVARD, SUITE 150 NORTHBROOK, IL 60062	
UTILITY PLAN - EAST	
NORTHWEST CROSSINGS 1421 W. SHURE DRIVE ARLINGTON HEIGHTS, IL 60004	
ORIGINAL ISSUE: 5/14/2015	KHA PROJECT NO. 168193001
SHEET NUMBER	
C6.1	



UTILITY LEGEND

	EX. WATER LINE
	EX. HYDRANT
	EX. WATER VALVE
	EX. SANITARY SEWER LINE
	EX. SANITARY SEWER MANHOLE
	EX. SANITARY SEWER CLEANOUT
	EX. STORM DRAIN LINE
	EX. STORM MANHOLE
	EX. STORM STRUCTURE/INLET
	EX. GAS LINE
	EX. GAS METER
	EX. UNDERGROUND ELECTRIC LINE
	EX. UNDERGROUND TELEPHONE LINE
	EX. LIGHT POLE
	PROPOSED UNDERGROUND ELECTRIC LINE
	GAS LINE (BY GAS COMPANY)
	PROPOSED PHONE LINE
	PROPOSED STORM SEWER LINE
	PROPOSED OPEN LID STORM STRUCTURE (PAVEMENT USE NEENAH R-2540) (GRASS USE NEENAH R-4340-B BEEHIVE)
	PROPOSED CLOSED LID STORM STRUCTURE (PAVEMENT USE NEENAH R-1772) (GRASS USE NEENAH R-1786)
	PROPOSED OPEN LID CURB STRUCTURE (B6.12 C&G USE NEENAH R-3281-A)
	PROPOSED SANITARY SEWER LINE
	PROPOSED SANITARY MANHOLE
	PROPOSED STORM/SANITARY CLEANOUT
	PROPOSED WATER LINE
	PROPOSED VALVE VAULT
	PROPOSED FIRE DEPARTMENT CONNECTION
	PROPOSED FIRE HYDRANT
	PROPOSED LIGHT POLE

UTILITY NOTES

GENERAL UTILITY NOTES

1. ALL WATER LINES SHALL BE DUCTILE IRON PIPE, CLASS 52.
2. ALL SANITARY SEWER LINES SHALL BE PVC MEETING, ASTM D-3034 SDR 26 EXCEPT FOR SANITARY SEWER THAT CROSSES ABOVE WATER MAIN, THIS PIPE SHALL BE AWWA C900 (UNLESS WATER MAIN CASING IS UTILIZED). PROVIDE 24" MINIMUM COVER.
3. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
4. ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
5. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE GOVERNING AUTHORITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.
6. CONTRACTOR TO CALL "JULIE" (1-800-892-0123) TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
7. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER / DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION. THE MUNICIPALITY SHALL BE NOTIFIED OF ANY AND ALL CHANGES TO THE DESIGN PLANS.
8. CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING REQUIREMENTS. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.
9. CONTRACTOR TO AVOID DISRUPTION OF ANY ADJACENT TENANT'S TRAFFIC OPERATIONS DURING INSTALLATION OF UTILITIES.
10. ALL DIMENSIONS ARE TO CENTERLINE OF PIPE OR CENTER OF MANHOLE UNLESS NOTED OTHERWISE.
11. SEE ARCHITECTURAL AND MEP PLANS FOR EXACT UTILITY CONNECTION LOCATIONS AT BUILDING.
12. LIGHT POLES SHOWN FOR COORDINATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE SITE LIGHTING PLANS BY OTHERS FOR MORE INFORMATION.
13. SEE DETAILS FOR LOCATING STORM STRUCTURES WITHIN THE CURB LINE.
14. STORMWATER FACILITIES MUST BE FUNCTIONAL BEFORE BUILDING CONSTRUCTION BEGINS.

**NORTHWEST
CROSSINGS**
1421 W. SHURE DRIVE
ARLINGTON HEIGHTS, IL 60004

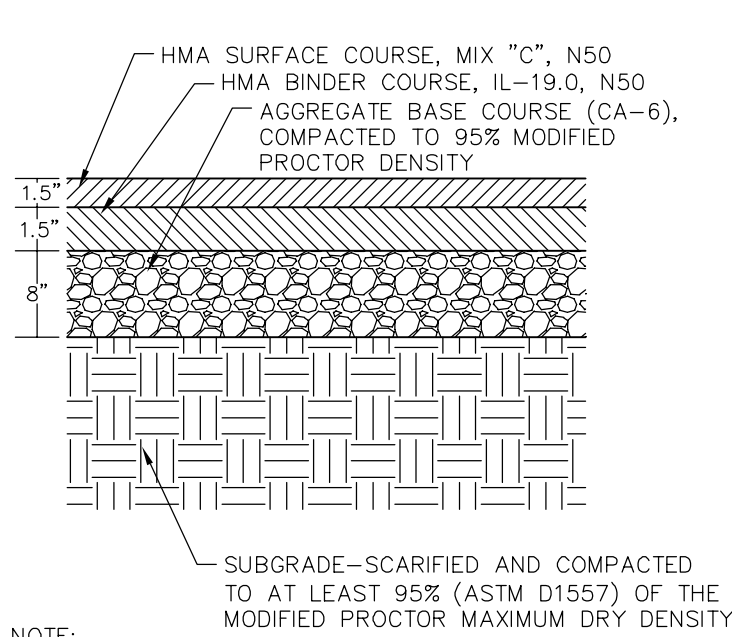
UTILITY PLAN -
WEST

**TORBURN
PARTNERS**
1033 SKOKIE BOULEVARD,
SUITE 150
NORTHBROOK, IL 60062

Kimley»»Horn
© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE ROAD, SUITE 350,
Lisle, IL 60532
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

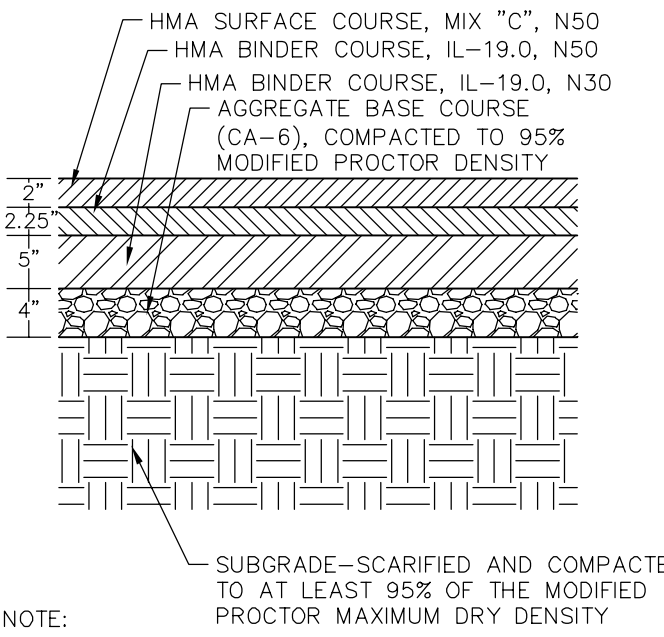
[illegible]

Drawing name: K:\GIS\DEV\168193001\Torburn Partners - Arlington Heights\2 Design\CADD\PlanSheets\Plan Engineering\C7.0-C7.1 CONSTRUCTION DETAILS.dwg C7.0 May 14, 2015 8:04pm by: celian.hornas
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



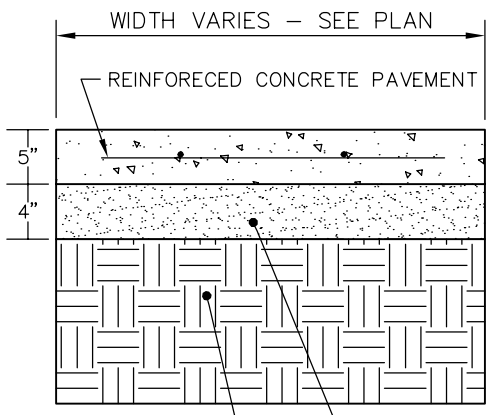
- NOTE:
1. PAVEMENT THICKNESS, SUBGRADE PREP, ETC. DETERMINED FROM EXISTING PAVEMENT SECTION.
 2. SEE NOTES #4.2 AND 4.3 UNDER PAVING NOTES ON SHEET C1.0 FOR PRIME COAT AND TACK-COAT REQUIREMENTS.

**STANDARD DUTY
ASPHALTIC PAVEMENT SECTION**
N.T.S.



- NOTE:
1. PAVEMENT THICKNESS, SUBGRADE PREP, ETC. DETERMINED FROM GEOTECHNICAL REPORT PERFORMED BY OZ ENGINEERING, LLC DATED DECEMBER 12, 2011. REFER TO REPORT FOR ALL INFORMATION RELATED TO PAVING.
 2. SEE NOTES #4.2 AND 4.3 UNDER PAVING NOTES ON SHEET C1.0 FOR PRIME COAT AND TACK-COAT REQUIREMENTS.

**HEAVY DUTY
ASPHALTIC PAVEMENT SECTION**
N.T.S.

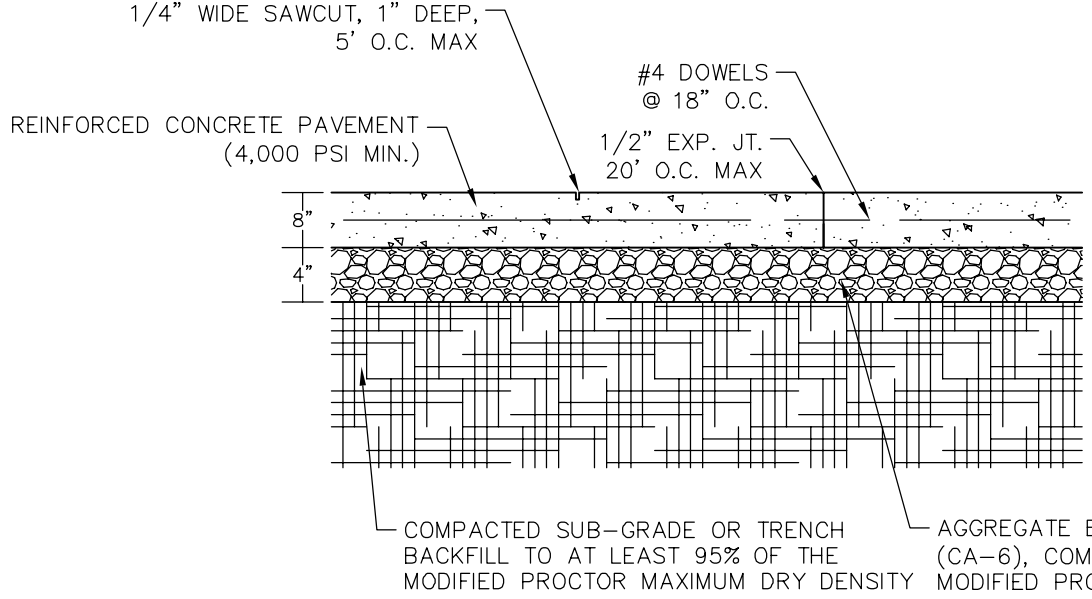


SUBGRADE--SCARIFIED AND COMPACTED TO AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY

AGGREGATE BASE COURSE (CA-6), COMPACTED TO 95% MODIFIED PROCTOR DENSITY

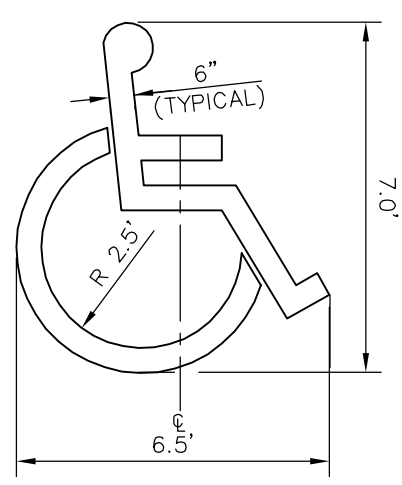
- NOTES:
1. ALL SIDEWALK SHALL BE CONSTRUCTED WITH CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI AT 14 DAYS.
 2. PROVIDE 1/2" EXPANSION JOINTS AT 20' MAXIMUM SPACING AND FILLED WITH PREMOLDED BITUMINOUS EXPANSION JOINT FILLER MATERIAL OR REDWOOD. EXPANSION JOINTS SHALL HAVE #4 DOWELS, LUBRICATED, 18" LONG, AT 12" CENTERS, 6" FROM EDGE.
 3. PROVIDE 3/8" GROOVED CONTROL JOINTS AT 5' CENTERS.
 4. WELDED WIRE FABRIC (6X6-6X6) SHALL BE INSTALLED THROUGH DRIVEWAYS AT 2" ABOVE SLAB BOTTOM.
 5. PROVIDE 1/2" BITUMINOUS EXPANSION JOINT FILLER MATERIAL WHERE WALK ABUTS EXISTING IMPROVEMENTS AND AT ALL CHANGES IN GRADE.
 6. USE 2-#4 REINFORCING BARS, 10' LONG OVER ALL UTILITY TRENCHES FOR NEW SIDEWALK AND CONNECTIONS TO EXISTING SIDEWALK.
 7. AT DRIVE APPROACHES, SIDEWALK PCC AND BASE THICKNESS SHALL MATCH THAT OF THE DRIVE.

CONCRETE SIDEWALK
N.T.S.

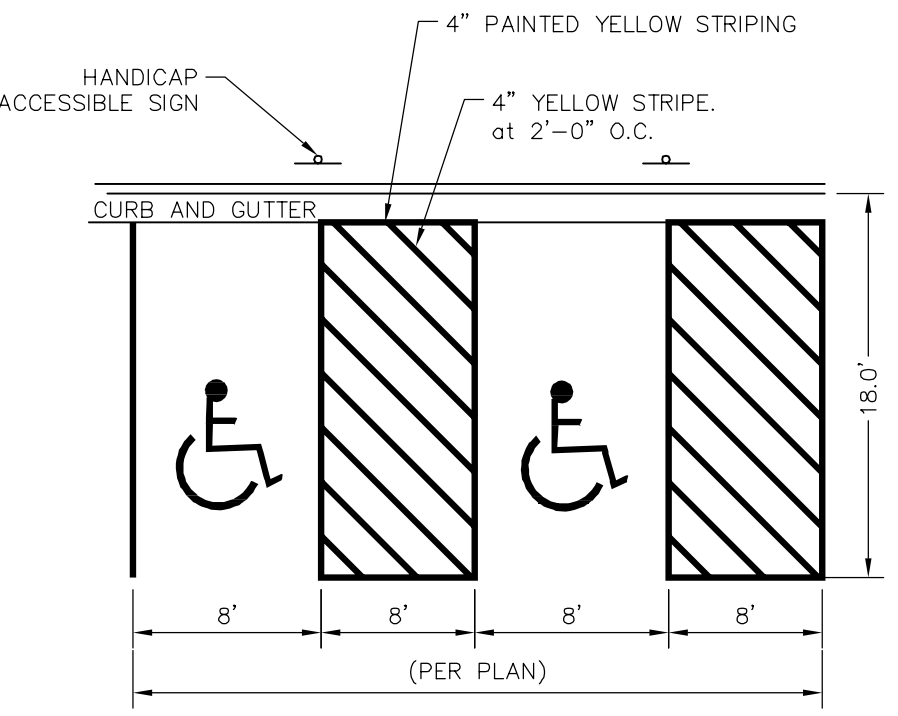


- NOTES:
- PAVEMENT THICKNESS PER VILLAGE OF ARLINGTON HEIGHTS
- CONCRETE COMPRESSIVE STRENGTH SHALL COMPLY WITH ASTM DESIGNATION C31. MINIMUM 28-DAY STRENGTH = 4000 PSI

**HEAVY DUTY
CONCRETE PAVEMENT SECTION**
N.T.S.

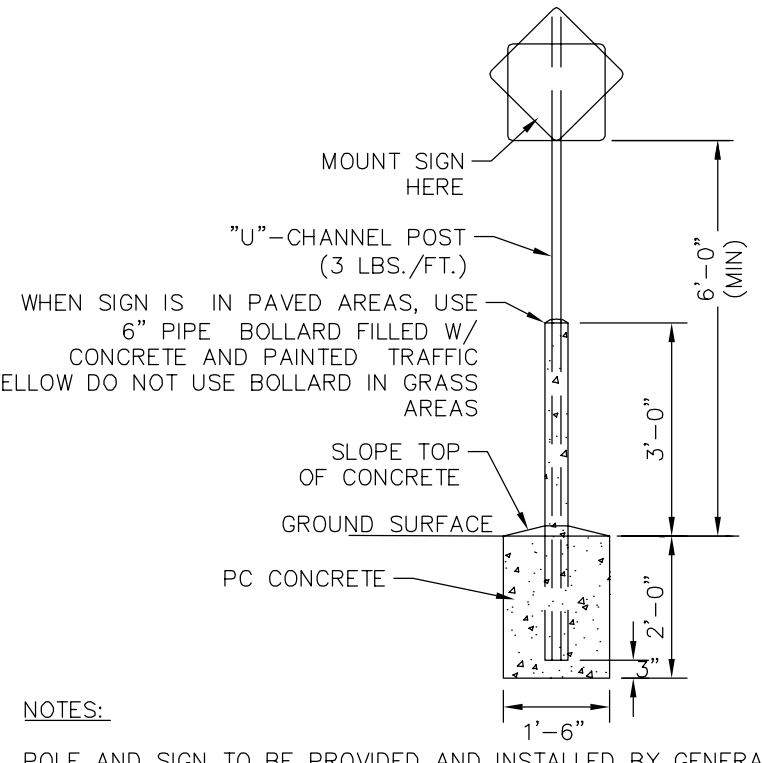


ACCESSIBLE PARKING SYMBOL
N.T.S.



NOTE: REFER TO PLAN FOR DETAILED LAYOUT AND DIMENSIONS

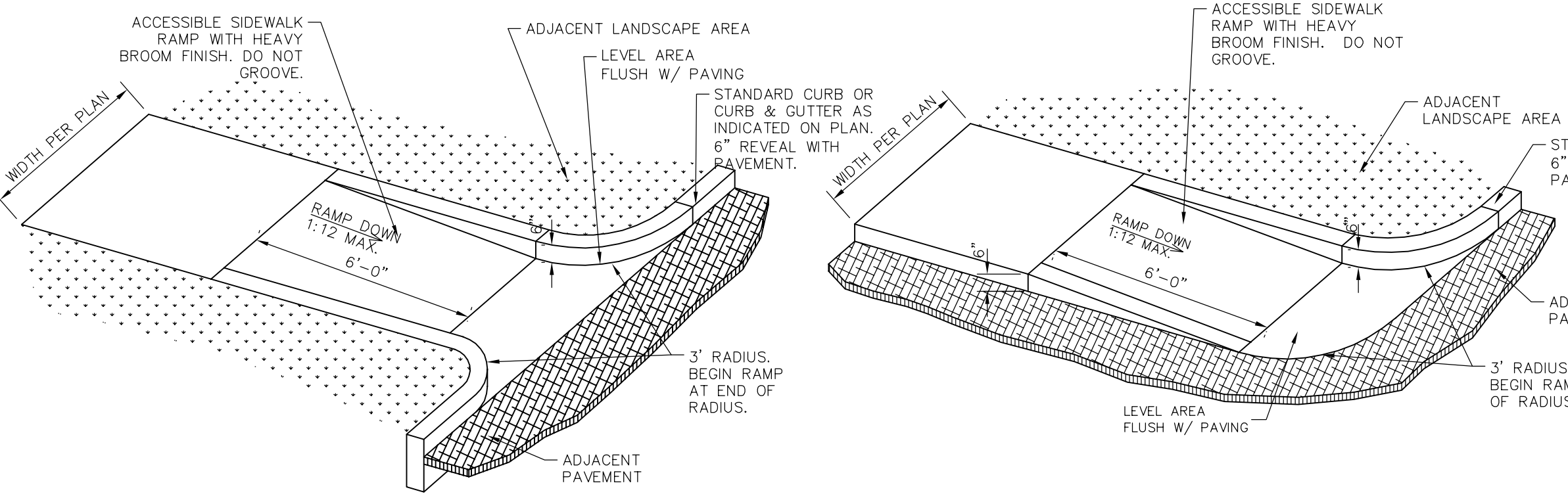
TYPICAL HANDICAP STRIPING
N.T.S.



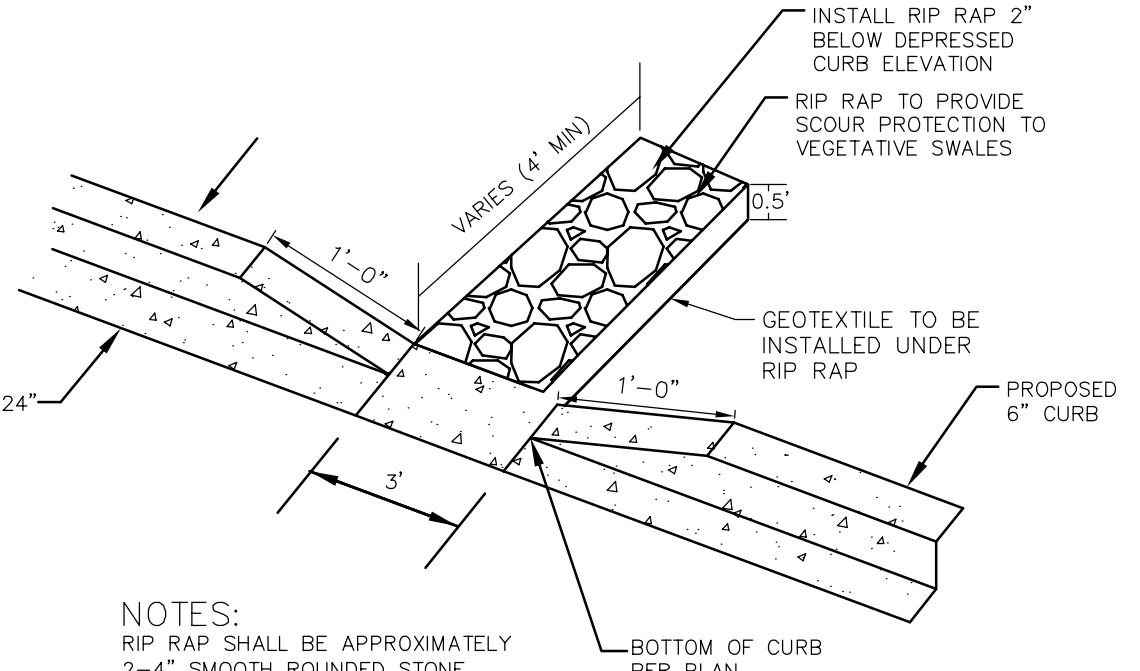
- NOTES:
- POLE AND SIGN TO BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR.

ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

STANDARD SIGN BASE
N.T.S.

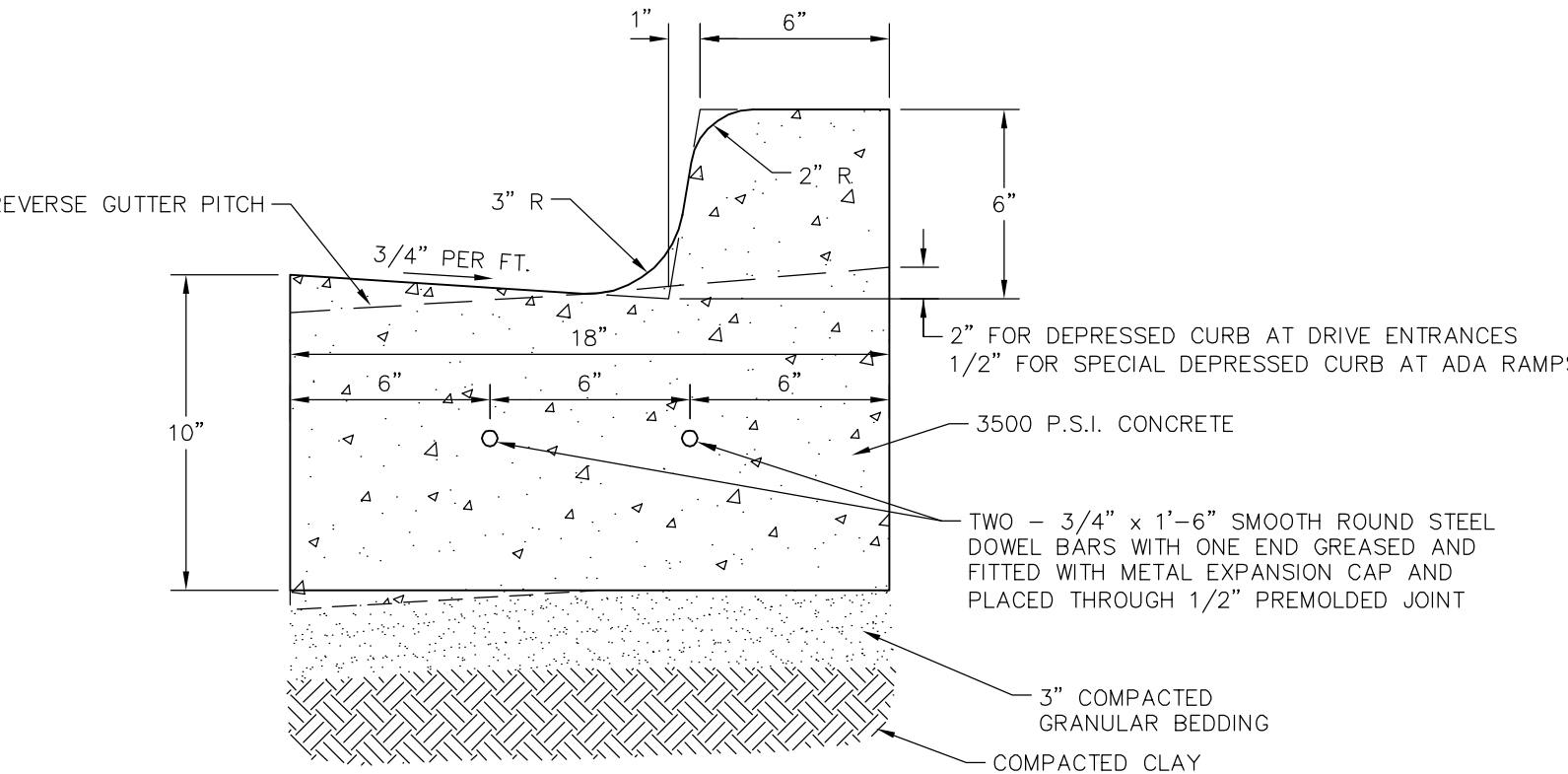


SIDEWALK AND SIDEWALK RAMPS
N.T.S.



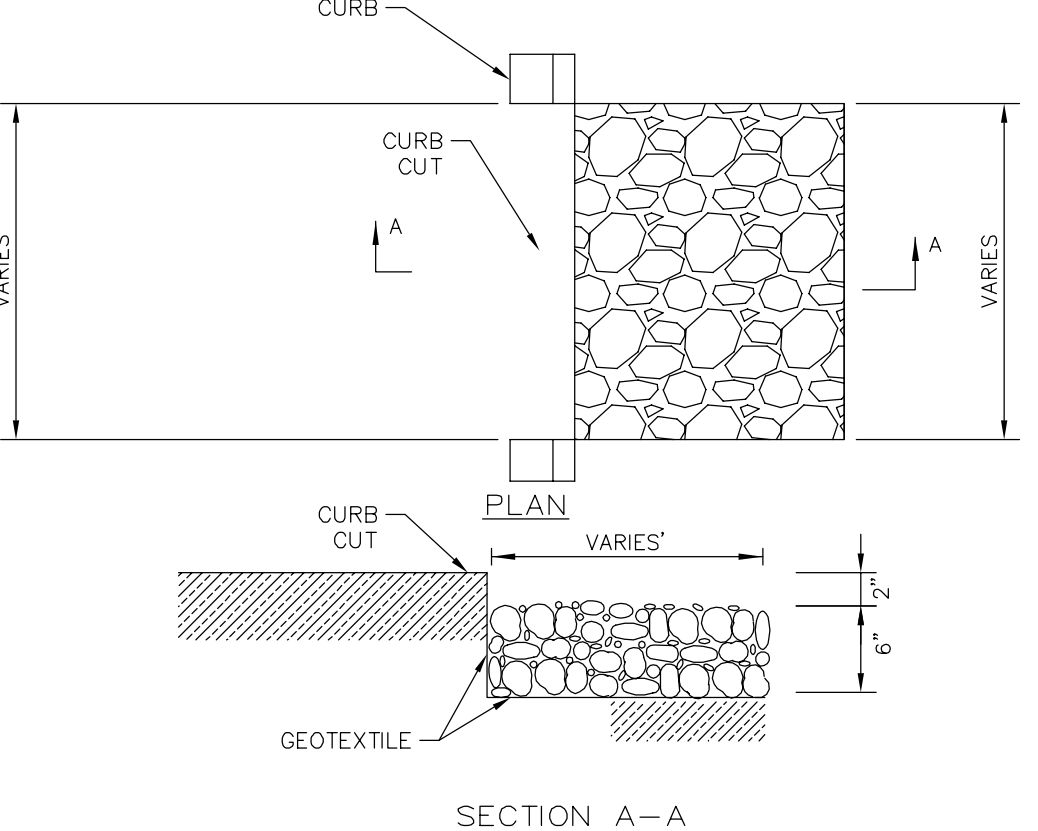
- NOTES:
- RIP RAP SHALL BE APPROXIMATELY 2-4" SMOOTH ROUNDED STONE.

CURB CUT
N.T.S.



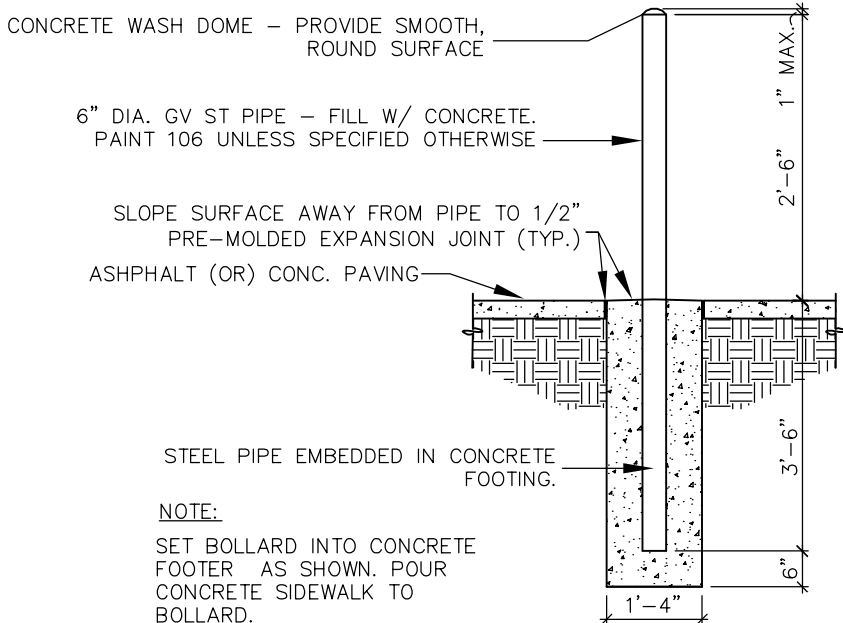
- NOTES: USE TWO - #5 REBARS FOR 10 L.F. ON EITHER SIDE OF ALL UTILITY TRENCHES. INSTALL EXPANSION JOINTS EVERY 50 FT. AND SAW-CUT CONSTRUCTION JOINTS EVERY 25 FT.

B6.12 CURB & GUTTER
N.T.S.

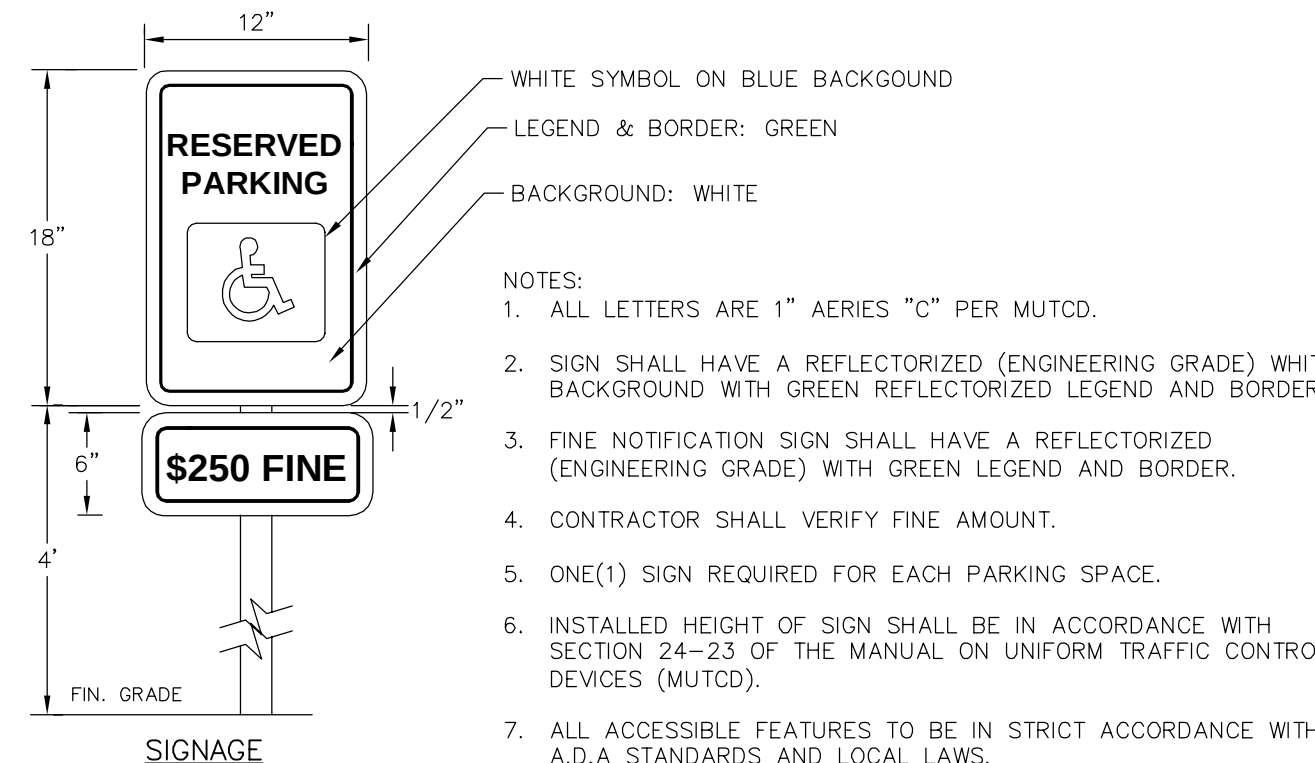


- NOTES:
1. The filter fabric shall meet the requirements in material specifications 592 GEOTEXTILE Table 1 or 2, class I, II, or III.
 2. The riprap shall be placed according to construction specification 61 LOOSE ROCK RIPRAP. The rock may be equipment placed.

**RIP RAP
(AT CURB CUT)**
N.T.S.

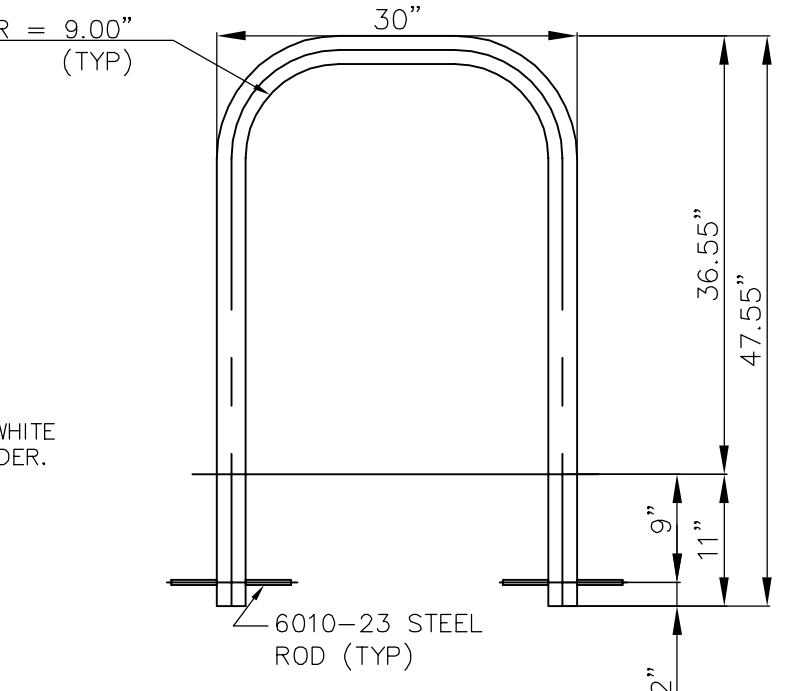


PARKING STALL BOLLARD
N.T.S.



- WHITE SYMBOL ON BLUE BACKGROUND
- LEGEND & BORDER: GREEN
- BACKGROUND: WHITE
- NOTES:
1. ALL LETTERS ARE 1" AERIES "C" PER MUTCD.
 2. SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH GREEN REFLECTORIZED LEGEND AND BORDER.
 3. FINE NOTIFICATION SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WITH GREEN LEGEND AND BORDER.
 4. CONTRACTOR SHALL VERIFY FINE AMOUNT.
 5. ONE(1) SIGN REQUIRED FOR EACH PARKING SPACE.
 6. INSTALLED HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
 7. ALL ACCESSIBLE FEATURES TO BE IN STRICT ACCORDANCE WITH A.D.A STANDARDS AND LOCAL LAWS.

ACCESSIBLE PARKING SIGNAGE
N.T.S.



- NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 2. FINISH IS ELECTROPLATED IN CHROMATE
 3. COLOR TO BE STANDARD BLACK

BIKE RACK
N.T.S.

Kimley»Horn

© 2015 KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE ROAD, SUITE 350,
ARLINGTON HEIGHTS, IL 60004
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: LEN
DRAWN BY: LEN
CHECKED BY: DMA

**TORBURN
PARTNERS**

1033 SKOKIE BOULEVARD,
SUITE 150
NORTHBROOK, IL 60062

**CONSTRUCTION
DETAILS**

**NORTHWEST
CROSSINGS**

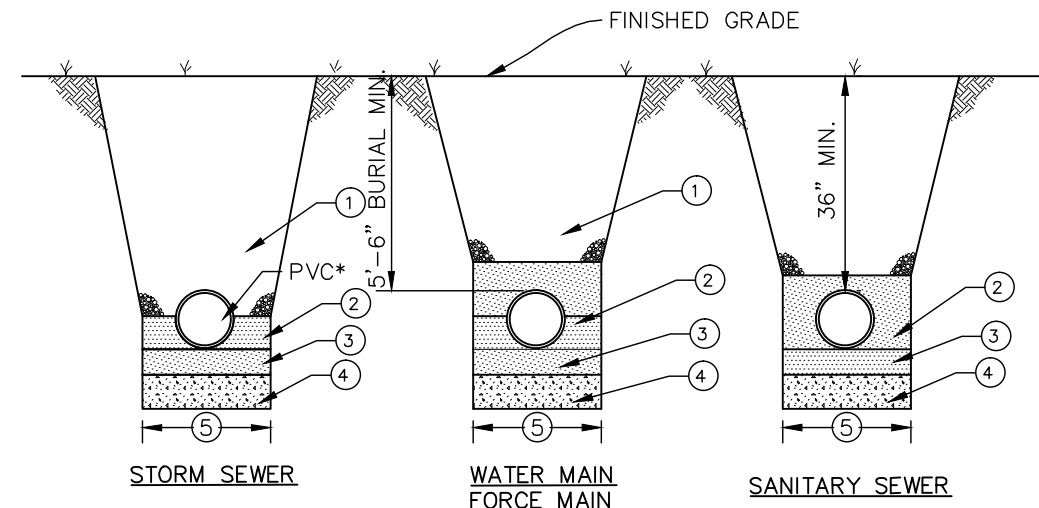
1421 W. SHURE DRIVE
ARLINGTON HEIGHTS, IL 60004

ORIGINAL ISSUE:
5/14/2015
KHA PROJECT NO.
168193001
SHEET NUMBER

C7.0

NO.	REVISIONS	DATE	BY

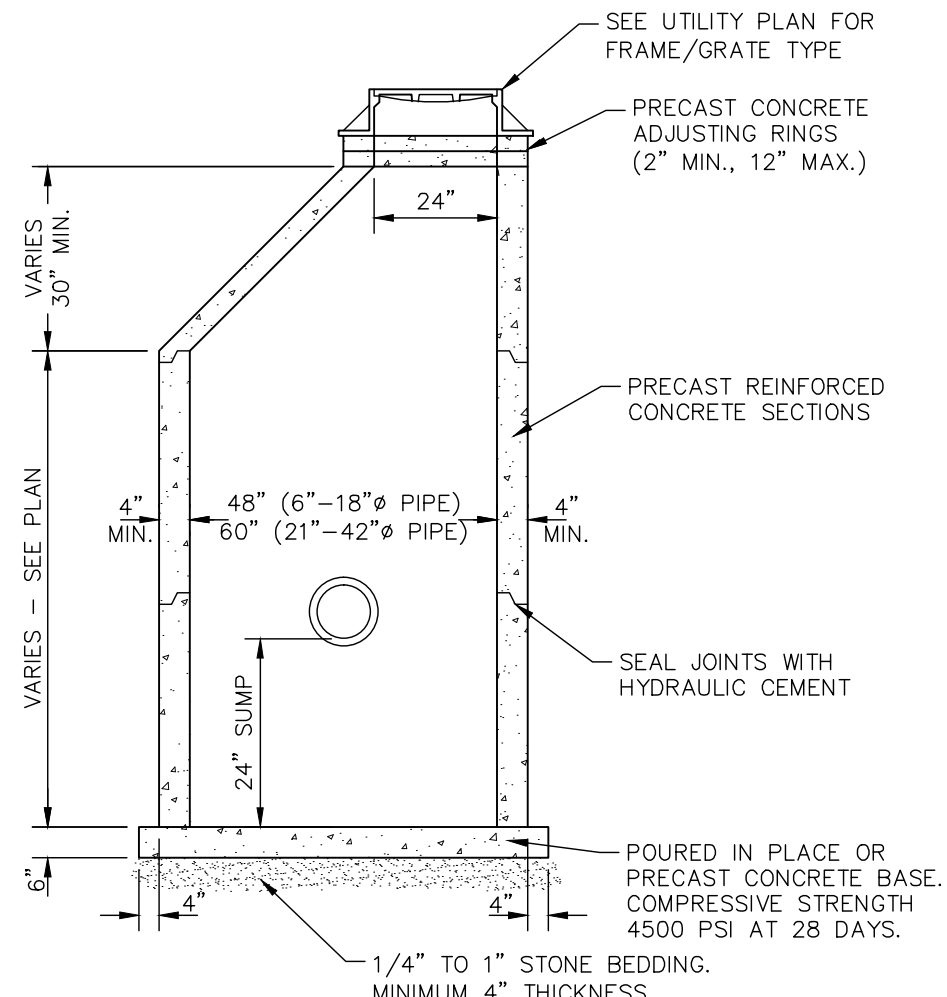
Drawing name: K:\GIS_DEVELOPMENT\16813001 Torburn Partners - Arlington Heights\2 Design\CAD\PlanSheets\Final Engineering\07-0-C7.1 CONSTRUCTION DETAILS.dwg C7.1 May 14, 2015 7:44pm By: colleen.thomas
This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



- MECHANICALLY COMPACTED CA-6 CRUSHED STONE IN 6 INCH LIFTS UNDER OR WITHIN 2 FEET OF ANY PAVEMENT, CURB, GUTTER AND SIDEWALK. MACHINE COMPACTION OF EXCAVATED MATERIAL IN OTHER LOCATIONS WHERE SUITABLE.
- WATERMAIN & FORCEMAIN: CA-11 OR CA-13 CRUSHED STONE TAMPED INTO PLACE TO SPRING LINE OF DUCTILE IRON PIPE ALL AROUND.
STORM SEWER & SANITARY SEWER: CA-11 OR CA-13 CRUSHED STONE TAMPED INTO PLACE TO SPRING LINE OF PIPE. *ADDITIONAL 12" OF CA-11 CRUSHED STONE ABOVE TOP OF PVC PIPE.
- 4" BED MECHANICALLY COMPACTED CA-11 OR CA-13 CRUSHED STONE
- UNSATISFACTORY MATERIAL TO BE REMOVED AND REPLACED.
- TRENCH WIDTH OUTSIDE DIAMETER + 18 IN.

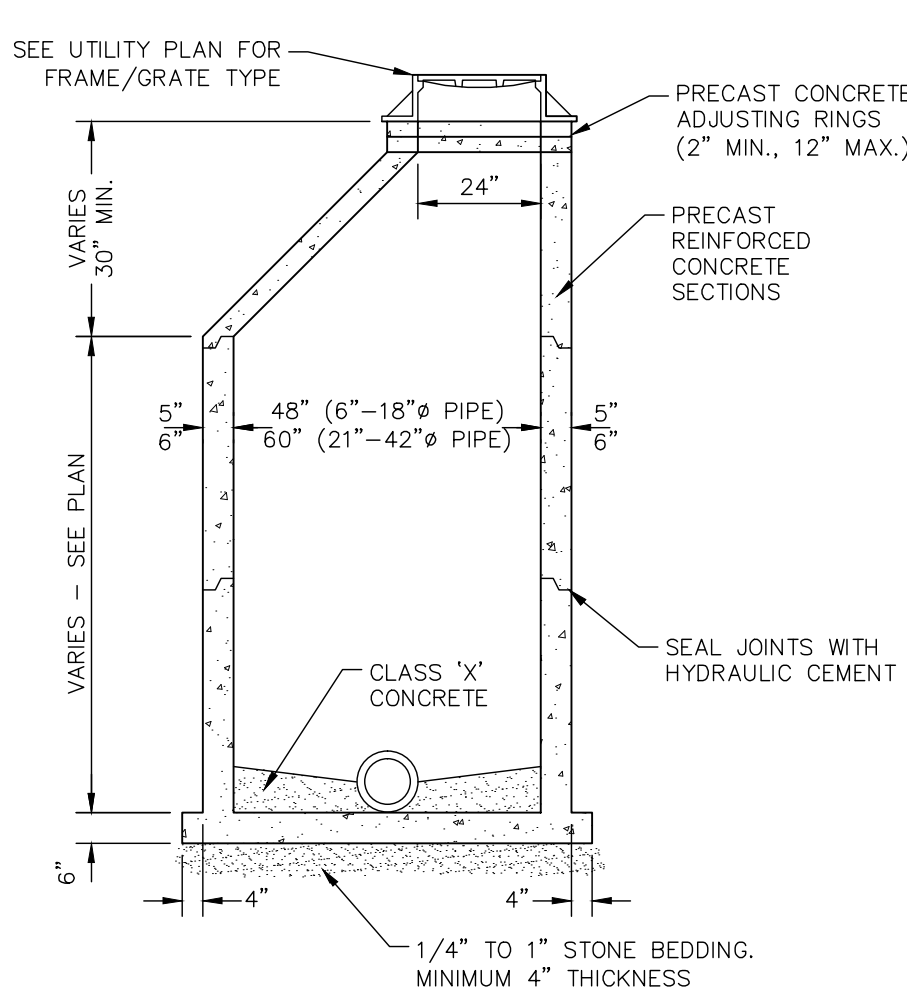
PIPE BEDDING DETAIL

N.T.S.



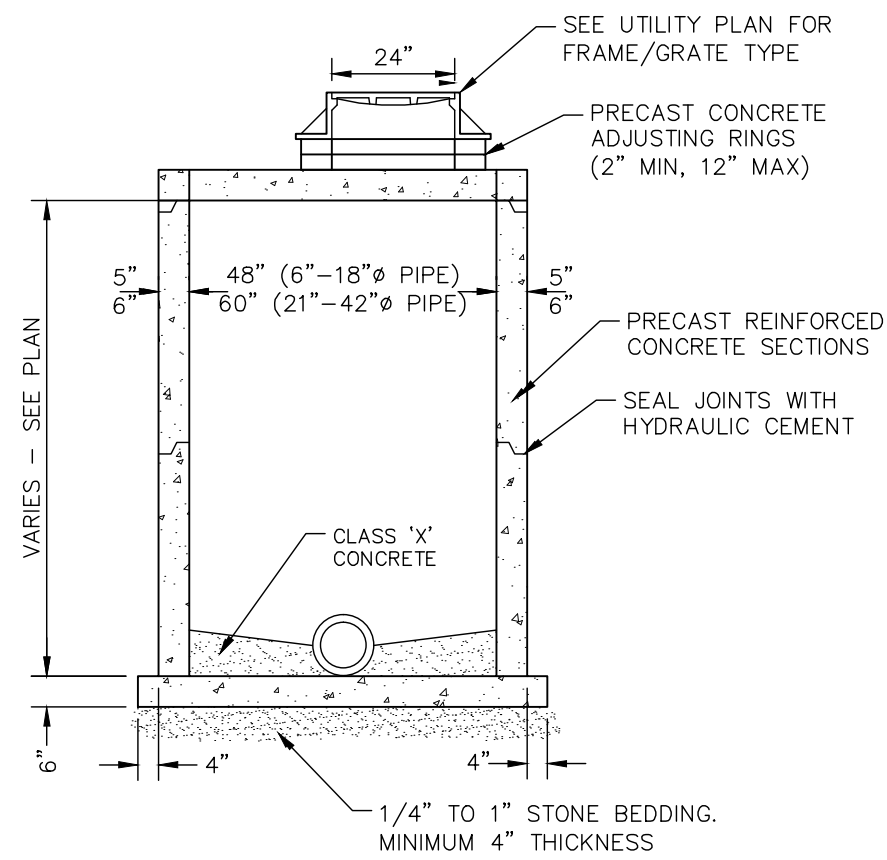
CATCH BASIN TYPE A

N.T.S.



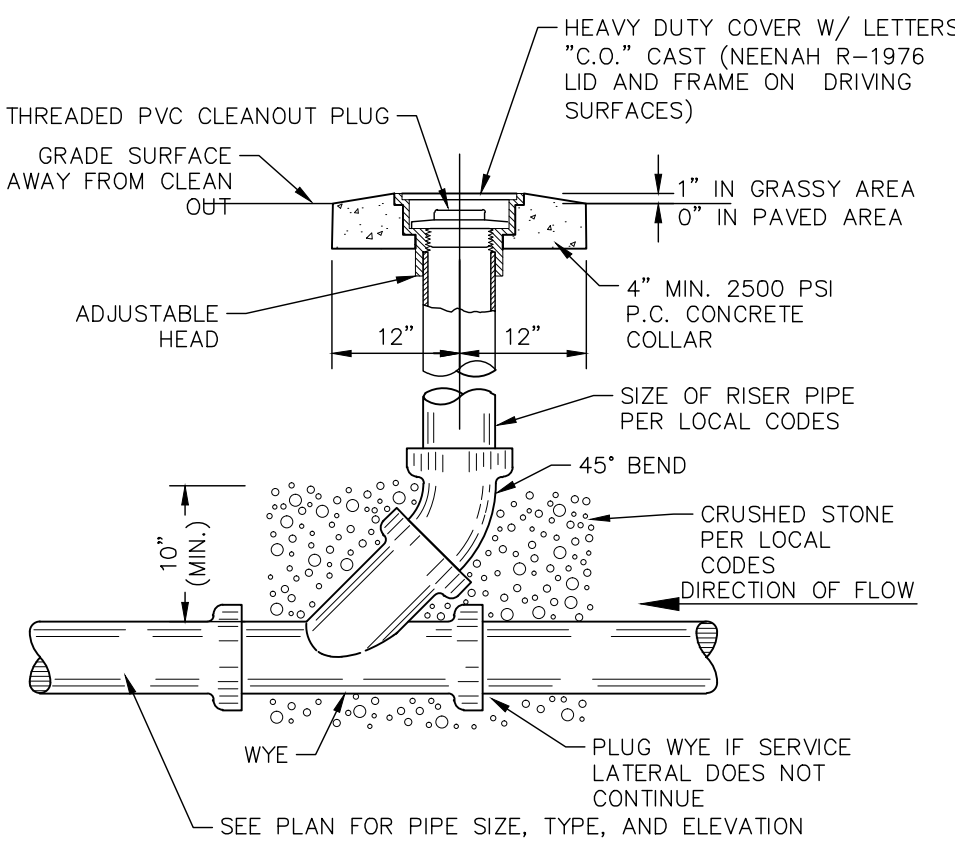
STORM MANHOLE TYPE A

N.T.S.



STORM MANHOLE (FLAT TOP)

N.T.S.

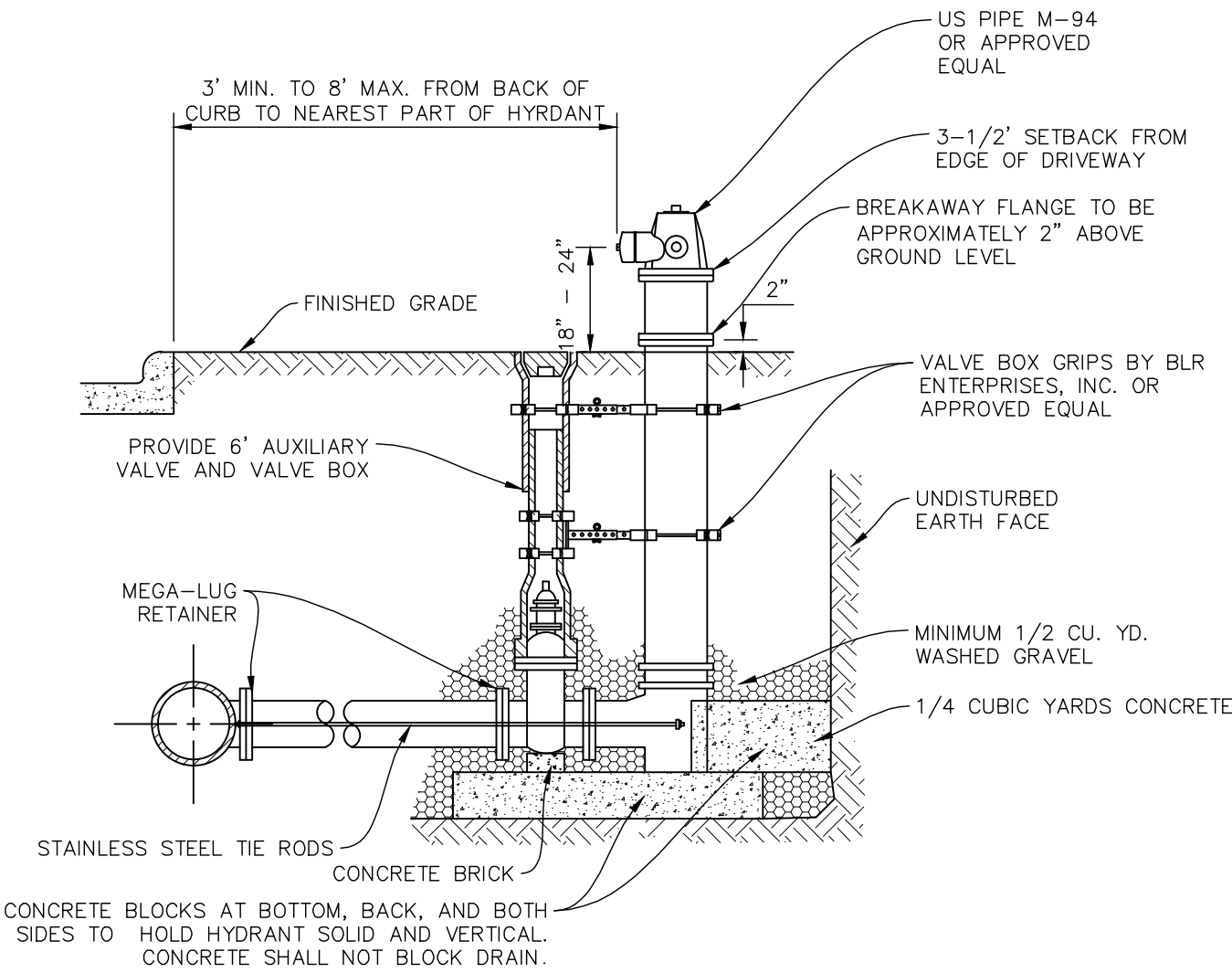


SANITARY/STORM CLEAN-OUT

N.T.S.

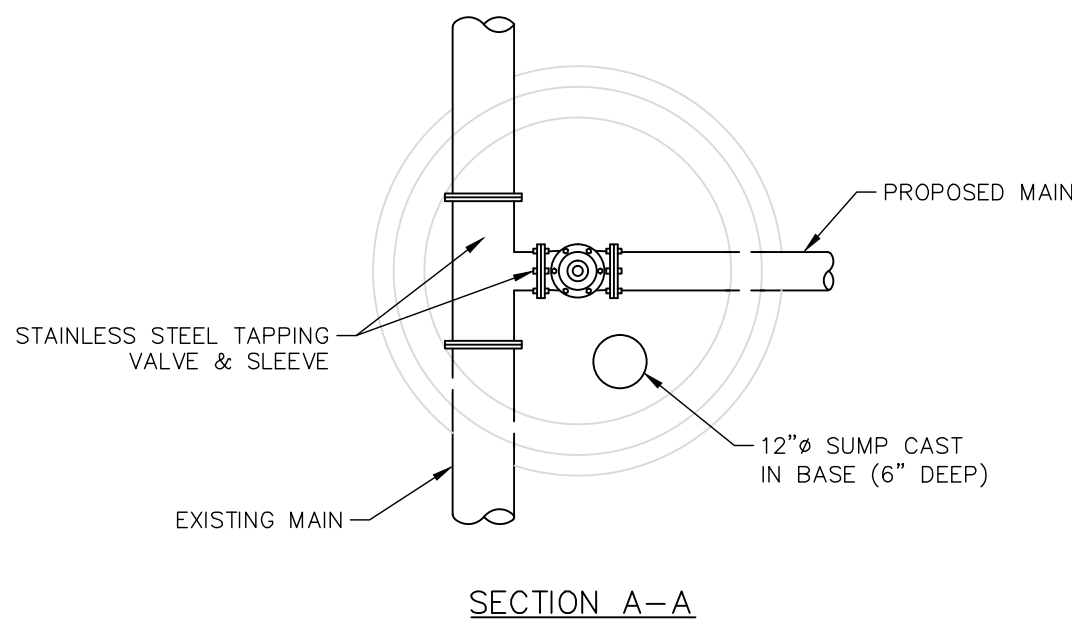
*FLAT TOP MANHOLE TO BE USED WHEN COVER IS LESS THAN 36". IF COVER IS GREATER THAN 36", USE TYPE A MANHOLE.

NOTE: SEE APPLICABLE DETAIL FOR BACKFILL AND BEDDING INSTRUCTIONS.



FIRE HYDRANT

N.T.S.



NOTES:

- UNLESS OTHERWISE NOTED, USE THE FOLLOWING FRAMES & GRATES: - IN PAVED AREAS: NEENAH R-1712 W/TYPE B COVER (CLOSED) - IN GRASS: NEENAH R-1772-A W/TYPE B COVER (CLOSED)
- EAST JORDAN EQUIVALENTS ALSO MAY BE USED.
- ALL COVERS SHALL BE SELF-SEALING WITH CONCEALED PICK HOLES AND HAVE "WATER" CAST INTO THE COVER.

VALVE AND VAULT AT PRESSURE CONNECTION

2808AG_X

GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
STANDARD	LIGHT DUTY	1089C08	7001-110-188
SOLID COVER	LIGHT DUTY	1089C08	7001-110-194
BRONZE	N/A	1089C08	7001-110-195
BRONZE	N/A	1089C08	7001-110-196
BRONZE	N/A	1089C08	7001-110-197
BRONZE	N/A	1089C08	7001-110-198
BRONZE	N/A	1089C08	7001-110-199
BRONZE	N/A	1089C08	7001-110-200
BRONZE	N/A	1089C08	7001-110-201
BRONZE	N/A	1089C08	7001-110-202
BRONZE	N/A	1089C08	7001-110-203
BRONZE	N/A	1089C08	7001-110-204
BRONZE	N/A	1089C08	7001-110-205
BRONZE	N/A	1089C08	7001-110-206
BRONZE	N/A	1089C08	7001-110-207
BRONZE	N/A	1089C08	7001-110-208
BRONZE	N/A	1089C08	7001-110-209
BRONZE	N/A	1089C08	7001-110-210
BRONZE	N/A	1089C08	7001-110-211
BRONZE	N/A	1089C08	7001-110-212
BRONZE	N/A	1089C08	7001-110-213
BRONZE	N/A	1089C08	7001-110-214
BRONZE	N/A	1089C08	7001-110-215
BRONZE	N/A	1089C08	7001-110-216
BRONZE	N/A	1089C08	7001-110-217
BRONZE	N/A	1089C08	7001-110-218
BRONZE	N/A	1089C08	7001-110-219
BRONZE	N/A	1089C08	7001-110-220
BRONZE	N/A	1089C08	7001-110-221
BRONZE	N/A	1089C08	7001-110-222
BRONZE	N/A	1089C08	7001-110-223
BRONZE	N/A	1089C08	7001-110-224
BRONZE	N/A	1089C08	7001-110-225
BRONZE	N/A	1089C08	7001-110-226
BRONZE	N/A	1089C08	7001-110-227
BRONZE	N/A	1089C08	7001-110-228
BRONZE	N/A	1089C08	7001-110-229
BRONZE	N/A	1089C08	7001-110-230
BRONZE	N/A	1089C08	7001-110-231
BRONZE	N/A	1089C08	7001-110-232
BRONZE	N/A	1089C08	7001-110-233
BRONZE	N/A	1089C08	7001-110-234
BRONZE	N/A	1089C08	7001-110-235
BRONZE	N/A	1089C08	7001-110-236
BRONZE	N/A	1089C08	7001-110-237
BRONZE	N/A	1089C08	7001-110-238
BRONZE	N/A	1089C08	7001-110-239
BRONZE	N/A	1089C08	7001-110-240
BRONZE	N/A	1089C08	7001-110-241
BRONZE	N/A	1089C08	7001-110-242
BRONZE	N/A	1089C08	7001-110-243
BRONZE	N/A	1089C08	7001-110-244
BRONZE	N/A	1089C08	7001-110-245
BRONZE	N/A	1089C08	7001-110-246
BRONZE	N/A	1089C08	7001-110-247
BRONZE	N/A	1089C08	7001-110-248
BRONZE	N/A	1089C08	7001-110-249
BRONZE	N/A	1089C08	7001-110-250
BRONZE	N/A	1089C08	7001-110-251
BRONZE	N/A	1089C08	7001-110-252
BRONZE	N/A	1089C08	7001-110-253
BRONZE	N/A	1089C08	7001-110-254
BRONZE	N/A	1089C08	7001-110-255
BRONZE	N/A	1089C08	7001-110-256
BRONZE	N/A	1089C08	7001-110-257
BRONZE	N/A	1089C08	7001-110-258
BRONZE	N/A	1089C08	7001-110-259
BRONZE	N/A	1089C08	7001-110-260
BRONZE	N/A	1089C08	7001-110-261
BRONZE	N/A	1089C08	7001-110-262
BRONZE	N/A	1089C08	7001-110-263
BRONZE	N/A	1089C08	7001-110-264
BRONZE	N/A	1089C08	7001-110-265
BRONZE	N/A	1089C08	7001-110-266
BRONZE	N/A	1089C08	7001-110-267
BRONZE	N/A	1089C08	7001-110-268
BRONZE	N/A	1089C08	7001-110-269
BRONZE	N/A	1089C08	7001-110-270
BRONZE	N/A	1089C08	7001-110-271
BRONZE	N/A	1089C08	7001-110-272
BRONZE	N/A	1089C08	7001-110-273
BRONZE	N/A	1089C08	7001-110-274
BRONZE	N/A	1089C08	7001-110-275
BRONZE	N/A	1089C08	7001-110-276
BRONZE	N/A	1089C08	7001-110-277
BRONZE	N/A	1089C08	7001-110-278
BRONZE	N/A	1089C08	7001-110-279
BRONZE	N/A	1089C08	7001-110-280
BRONZE	N/A	1089C08	7001-110-281
BRONZE	N/A	1089C08	7001-110-282
BRONZE	N/A	1089C08	7001-110-283
BRONZE	N/A	1089C08	7001-110-284
BRONZE	N/A	1089C08	7001-110-285
BRONZE	N/A	1089C08	7001-110-286
BRONZE	N/A	1089C08	7001-110-287
BRONZE	N/A	1089C08	7001-110-288
BRONZE	N/A	1089C08	7001-110-289
BRONZE	N/A	1089C08	7001-110-290
BRONZE	N/A	1089C08	7001-110-291
BRONZE	N/A	1089C08	7001-110-292
BRONZE	N/A	1089C08	7001-110-293
BRONZE	N/A	1089C08	7001-110-294
BRONZE	N/A	1089C08	7001-110-295
BRONZE	N/A	1089C08	7001-110-296
BRONZE	N/A	1089C08	7001-110-297
BRONZE	N/A	1089C08	7001-110-298
BRONZE	N/A	1089C08	7001-110-299
BRONZE	N/A	1089C08	7001-110-300

(3.4) VARIOUS TYPES OF INLET & OUTLET ADAPTERS AVAILABLE:
4" - 6" FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL, ADHANCOR SINGLE WALL), PVC SEWER (EX: SDR 35), PVC DWV (EX: SCH 40), PVC C900/C905, CORRUGATED & RIBBED PVC

2810AG_X

GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
STANDARD	LIGHT DUTY	1089C08	7001-110-188
SOLID COVER	LIGHT DUTY	1089C08	7001-110-194
BRONZE	N/A	1089C08	7001-110-195
BRONZE	N/A	1089C08	7001-110-196
BRONZE	N/A	1089C08	7001-110-197
BRONZE	N/A	1089C08	7001-110-198
BRONZE	N/A	1089C08	7001-110-199
BRONZE	N/A	1089C08	7001-110-200
BRONZE	N/A	1089C08	7001-110-201
BRONZE	N/A	1089C08	7001-110-202
BRONZE	N/A	1089C08	7001-110-203
BRONZE	N/A	1089C08	7001-110-204
BRONZE	N/A	1089C08	7001-110-205
BRONZE	N/A	1089C08	7001-110-206
BRONZE	N/A	1089C08	7001-110-207
BRONZE	N/A	1089C08	7001-110-208
BRONZE	N/A	1089C08	7001-110-209
BRONZE	N/A	1089C08	7001-110-210
BRONZE	N/A	1089C08	7001-110-211
BRONZE	N/A	1089C08	7001-110-212
BRONZE	N/A	1089C08	7001-110-213
BRONZE	N/A	1089C08	7001-110-214
BRONZE	N/A	1089C08	7001-110-215
BRONZE	N/A	1089C08	7001-110-216
BRONZE	N/A	1089C08	7001-110-217
BRONZE	N/A	1089C08	7001-110-218
BRONZE	N/A	1089C08	7001-110-219
BRONZE	N/A	1089C08	7001-110-220
BRONZE	N/A	1089C08	7001-110-221
BRONZE	N/A	1089C08	7001-110-222
BRONZE	N/A	1089C08	7001-110-223
BRONZE	N/A	1089C08	7001-110-224
BRONZE	N/A	1089C08	7001-110-225
BRONZE	N/A	1089C08	7001-110-226
BRONZE	N/A	1089C08	7001-110-227
BRONZE	N/A	1089C08	7001-110-228
BRONZE	N/A	1089C08	7001-110-229
BRONZE	N/A	1089C08	7001-110-230
BRONZE	N/A	1089C08	7001-110-231
BRONZE	N/A	1089C08	7001-110-232
BRONZE	N/A	1089C08	7001-110-233
BRONZE	N/A	1089C08	7001-110-234
BRONZE	N/A	1089C08	7001-110-235
BRONZE	N/A	1089C08	7001-110-236
BRONZE	N/A	1089C08	7001-110-237
BRONZE	N/A	1089C08	7001-110-238
BRONZE	N/A	1089C08	7001-110-239
BRONZE	N/A	1089C08	7001-110-240
BRONZE	N/A	1089C08	7001-110-241
BRONZE	N/A	1089C08	7001-110-242
BRONZE	N/A	1089C08	7001-110-243
BRONZE	N/A	1089C08	7001-110-244
BRONZE	N/A	1089C08	7001-110-245
BRONZE	N/A	1089C08	7001-110-246
BRONZE	N/A	1089C08	7001-110-247
BRONZE	N/A	1089C08	7001-110-248
BRONZE	N/A	1089C08	7001-110-249
BRONZE	N/A	1089C08	7001-110-250
BRONZE	N/A	1089C08	7001-110-251
BRONZE	N/A	1089C08	7001-110-252
BRONZE	N/A	1089C08	7001-110-253
BRONZE	N/A	1089C08	7001-110-254
BRONZE	N/A	1089C08	7001-110-255
BRONZE	N/A	1089C08	7001-110-256
BRONZE	N/A	1089C08	7001-110-257
BRONZE	N/A	1089C08	7001-110-258
BRONZE	N/A	1089C08	7001-110-259
BRONZE	N/A	1089C08	7001-110-260
BRONZE	N/A	1089C08	7001-110-261
BRONZE	N/A	1089C08	7001-110-262
BRONZE	N/A	1089C08	7001-110-263
BRONZE	N/A	1089C08	7001-110-264
BRONZE	N/A	1089C08	7001-110-265
BRONZE	N/A	1089C08	7001-110-266
BRONZE	N/A	1089C08	7001-110-267
BRONZE	N/A	1089C08	7001-110-268
BRONZE	N/A	1089C08	7001-110-269
BRONZE	N/A	1089C08	7001-110-270
BRONZE	N/A	1089C08	7001-110-271
BRONZE	N/A	1089C08	7001-110-272
BRONZE	N/A	1089C08	7001-110-273
BRONZE	N/A	1089C08	7001-110-274
BRONZE	N/A	1089C08	7001-110-275
BRONZE	N/A	1089C08	7001-110-276
BRONZE	N/A	1089C08	7001-110-277
BRONZE	N/A	1089C08	7001-110-278
BRONZE	N/A	1089C08	7001-110-279
BRONZE	N/A	1089C08	7001-110-280
BRONZE	N/A	1089C08	7001-110-281
BRONZE	N/A	1089C08	7001-110-282
BRONZE	N/A	1089C08	7001-110-283
BRONZE	N/A	1089C08	7001-110-284
BRONZE	N/A	1089C08	7001-110-285
BRONZE	N/A	1089C08	7001-110-286
BRONZE	N/A	1089C08	7001-110-287
BRONZE	N/A	1089C08	7001-110-288
BRONZE	N/A	1089C08	7001-110-289
BRONZE	N/A	1089C08	7001-110-290
BRONZE	N/A	1089C08	7001-110-291
BRONZE	N/A	1089C08	7001-110-292
BRONZE	N/A	1089C08	7001-110-293
BRONZE	N/A	1089C08	7001-110-294
BRONZE	N/A	1089C08	7001-110-295</

