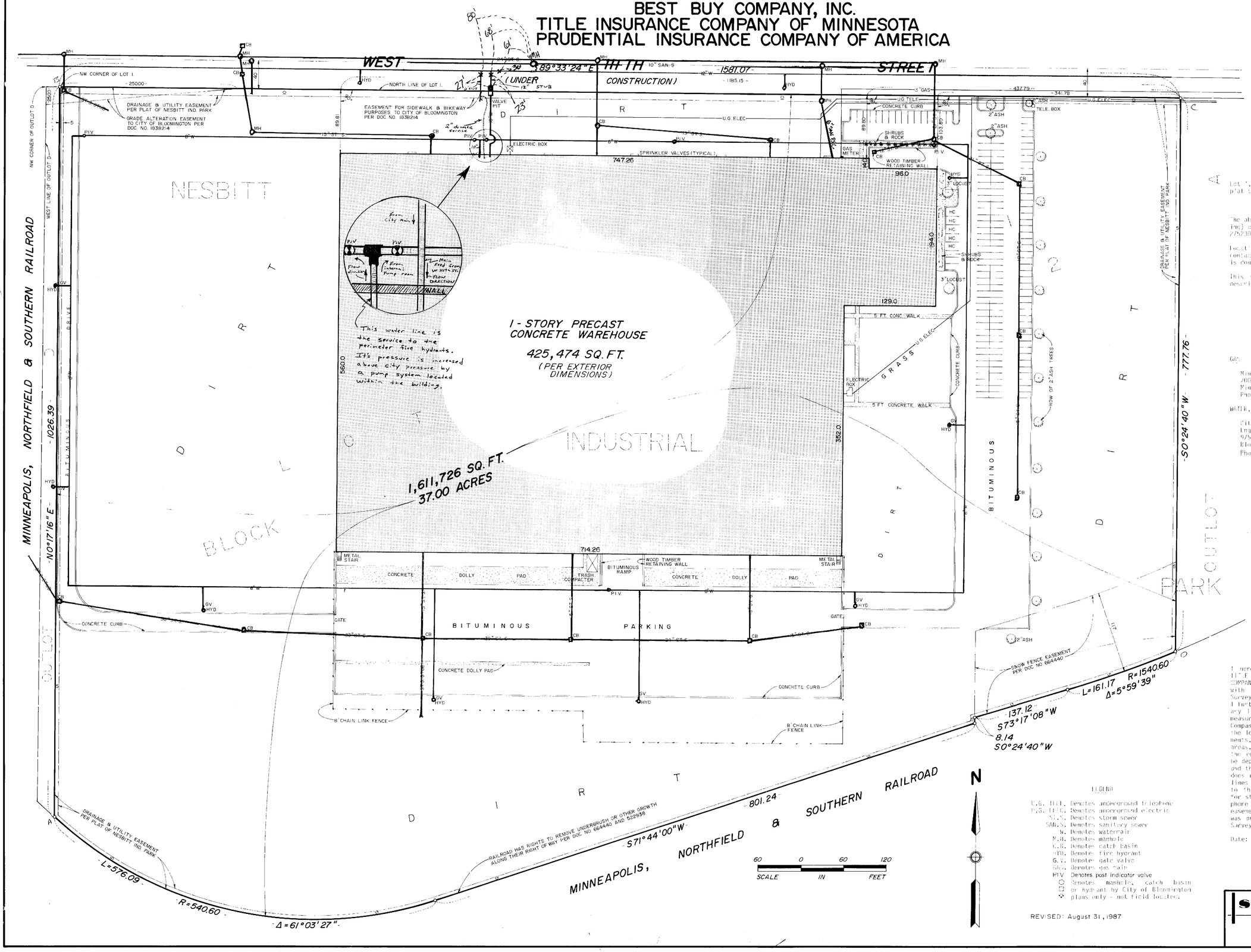
ALTA - ACSM SURVEY FOR:

NESBITT ASSOCIATES
BEST BUY COMPANY, INC.
TITLE INSURANCE COMPANY OF MINNESOTA
PRUDENTIAL INSURANCE COMPANY OF AMERICA



PROPERTY DESCRIPTION PER TITLE INSURANCE
COMMITMENT NO. 586690

Lot 1, Block 2, NESBITT INDUSTRIAL PARK, according to the recorded plat thereof, Hennepin County, Minnesota.

NOTES

The above described property lies in Zone C (Area of Minimal Flooding) of Flood Insurance Rate Map, Panel 10, Community Panel Number 275230 0010 B dated September 16, 1981.

Locations of all utilities shown are approximate only. Please contact utility companies for exact locations before any digging is done.

This surveyor is unaware of any easements affecting the above described property other than shown.

UTILITIES

GAS
Minnegasco
700 Linden Ave.
Minneapolis, MN 55403
Phone: 343-1760

TELEPHONE
Northwestern Bell
224 South 5th Street
Minneapolis, MN 55402
Phone: 932-2666

WATER, SANITARY & STORM SEWER
City of Bloomington
Engineering Department
9750 James Ave. South
Bloomington, MN 55431
Phone: 887-9612

ELECTRIC
Northern States Power
5309 W. 70th Street
Edina, MN 55435
Phone: 941-7992

BUILDING SETBACKS

60 foot front yard
60 foot side yard
75 foot rear yard
100 foot from any Residential District

NUMBER OF PARKING STALLS:

151 (Aug. 25, 1987)

I hereby certify to NESBITT ASSOCIATES, BEST BUY COMPANY, INC., TITLE INSURANCE COMPANY OF MINNESOTA and THE PRUDENTIAL INSURANCE COMPANY OF AMERICA that this As-Built survey was made in accordance with the "Minimum Standard Detail Requirements for Land Title Surveys" jointly established and adopted by ALTA and ACSM in 1962. I further certify that this survey shows the description and boundary lines of the property; the location and exterior lines and measurements of all recorded easements as listed in Title Insurance Company of Minnesota Commitment No. 586690; all roads and fences; the location of all adjacent streets; the location of the improvements, including all buildings, structures, driveways, parking areas, and similar improvements, and all building setback lines; the recording information as to all recorded easements which can be depicted on a survey; the area of the property (in square feet) and the number of parking stalls. I also certify that the property does not lie within a designated flood plain, that all boundary lines of the property that abut public right-of-way are coincident to the boundary lines of the property, and that utility lines for storm sewer, water, sanitary sewer, gas, electricity and telephone are in public streets abutting the property or in dedicated easements as shown on the survey. I also certify that this survey was prepared under my supervision and that I am a Licensed Land Surveyor under the laws of the State of Minnesota.

Date: August 25, 1987

SUNDE LAND SURVEYING, INC.

BY: Edward H. Sunde
Edward H. Sunde, R.L.S. Reg. No. 8612

LEGEND

U.G. TELE. Denotes underground telephone
U.G. ELEC. Denotes underground electric
ST.S. Denotes storm sewer
SAN.S. Denotes sanitary sewer
W. Denotes watermain
M.H. Denotes manhole
C.B. Denotes catch basin
HYD. Denote: fire hydrant
G.V. Denote: gate valve
GAS. Denotes gas main
P.I.V. Denotes post indicator valve
○ Denotes manhole, catch basin or hydrant by City of Bloomington plans only - not field located.

REVISED: August 31, 1987

Sunde Land Surveying Inc.

9001 E. Bloomington Freeway (35W)
Bloomington, MN 55420
(612) 881-2455

48 - 87 183/45 KL . SEC. 5, T115, R21.

FUTURE ADDITION
Floor Elevation = 812.0

PROPOSED BUILDING
Floor Elevation = 812.0

FUTURE ADDITION
Floor Elev = 812.0

111TH ST. W.

SAN S.M.H. A
TOP = 816.5
INV = 797.5

ST S. M.H. 16
TOP = 807.8
INV = 803.8

ST S. M.H. 15
TOP = 810.5
INV = 804.3
INV = 803.7

ST S. M.H. 14
TOP = 810.5
INV = 805.5

ST S. M.H. 13
TOP = 809.
INV = 804.3
INV = 804.2

ST S. M.H. 12
TOP = 811.0
INV = 805.0

ST S. C.B. 10
TOP = 807.3
INV = 804.2

ST S. C.B. 11
TOP = 810.6
INV = 801.2

ST S. C.B. 9
TOP = 808.8
INV = 802.2
INV = 802.4

ST S. C.B. 8
TOP = 808.8
INV = 804.
INV = 803.8

ST S. C.B. 7
TOP = 808.8
INV = 803.3

ST S. C.B. 6
TOP = 808.8
INV = 803.3

ST S. C.B. 5
TOP = 805.8
INV = 796.3
INV = 796.1

ST S. C.B. 4
TOP = 805.3
INV = 799.5
INV = 799.1

ST S. C.B. 3
TOP = 805.8
INV = 799.3

ST S. C.B. 2
TOP = 805.8
INV = 800.3

ST S. C.B. 1
TOP = 807.4
INV = 803.3

SAN S. SERV TO BLDG

SAN S. STUB
ELEV = 798.0

2 RCP ST S. STUB

12" RCP ST S.

15" RCP ST S.

18" RCP ST S.

21" RCP ST S.

24" RCP ST S.

27" RCP ST S.

30" RCP ST S.

33" RCP ST S.

N

SCALE IN FEET
50 0 50 100

DATE	REVISION
4/7/87	DRAINAGE SWALE & INVERT ELEV.
4/28/87	SANITARY INVERT
4/29/87	REMOVE SPUR FILL
5/2/87	LOWER BUILDING
5/6/87	CHANGE CULVERT
5/8/87	BLDG. GRADE TO 812

BEST BUY COMPANY, INC. WAREHOUSE
BLOOMINGTON, MINNESOTA

Sunde Engineering, Inc.

GRADING AND GRAINAGE PLAN

SHEET
OF

W. 111th ST
1029

6201
W. 111TH ST

72 STATIC
21 RES.
5130 GPM

6" 12" CITI MAIN

SEE VALVE PIT SECTION

UNDG BY OTHERS

8" POST IND. VALVE

HYDROSTATIC FROM HERE TO P.I. VALVE AT NW & N.E. CORNERS 7/21/87 MS

SYSTEM #1 37,540 ft²

SYSTEM #2 37,520 ft²

SYSTEM #3 37,001 ft²

SYSTEM #4 37,201 ft²

SYSTEM #5 37,375 ft²

SYSTEM #6 51,973 ft²

SYSTEM #7 37,540 ft²

SYSTEM #8 37,520 ft²

SYSTEM #9 37,941 ft²

SYSTEM #10 39,942 ft²

SYSTEM #11 33,143 ft²

Vault

25'

17.8'

53.7'

2" End of 6" Stub

6" 45° Bends

P.I.V.

6201

HYD

2½"x2½"x4" FIRE DEPT. CONN. BRASS N.S.T.

2½"FLG 90° ELL / BLK w/ WATER FLOW VAL w/ ½" BALL DRIP

10" DET. CHK VAL W/BY-PASS METER 2 10" OS&Y VAL

10"x10"x8" FLG TEE EXC

10"x10"x6" FLG TEE EXC

10" 10" 11" 1'4"

VALVE PIT SECTION

10" UNDG. MUST BE INSTALLED IN PLUMB LEVEL POSITION, TWO HOLES WITH WALL 12 ABOVE FINISH FLOOR (BY OTHERS)

SECTION B-B

10" FLG 90° ELL (BY MTKA)

10" LIGHT WALL PIPE

10" VIC 90° ELL W/ 1-EDGE FLEX COUP (BY MTKA)

10" VIC FLG (BY MTKA)

25'5"

SECTION A-A

8" UNDG LOOP

ALARM MTR'D & LIGHT

2½"x2½"x4" FIRE DEPT'M CONN BRASS N.P.T.

4" WAFER CHK VALVE W/ ½" BALL DRIP

10" VIC FLG

10" F.F

8'9" N.T.S.

25'5" N.T.S.

75 P.S.I. @ 2000 G.P.M.

PLAN VIEW OF PUMP ROOM

N

1	FAIRBANKS MODEL 2060 GPM 75 PSI	
	10"x6" FLG (BY MTKA)	1 REQ
2	10" x 90° FLANGE ELBOW	1 REQ
3	8"x 10" FLG INCREASER COUP. (BY MTKA)	1 REQ
4	10" OS & Y VALVE (BY MTKA)	4 REQ
5	10"x10"x8" FLG TEE (BY MTKA)	2 REQ
6	10" SUPERFLOW VAL (BY MTKA)	4 REQ
7	10" DET. CHK VAL W/ BY-PASS METER (BY MTKA)	1 REQ.
8	10" 90° FLG ELL (BY MTKA)	3 REQ
9	10" FLG SLIP ON COUPLING (BY MTKA)	1 REQ
10	10"x10"x10" FLG TEE (BY MTKA)	3 REQ
11	10"x10"x6" FLG TEE (BY MTKA)	1 REQ
12	12"x10" FLG REDUCER (BY MTKA)	1 REQ
13	10" FLG MFR ADAPTER (BY MTKA)	1 REQ
14	2" PIEZOMETER BOX W/ KEY SWITCH (BY MTKA)	2 REQ
15		
16	10" MISSION SWING CHECK VALVE (BY MTKA)	1 REQ
17	4" FLG 90° ELL	3 REQ
18	4" WAFER CHK VAL W/ ½" BALL DRIP	2 REQ

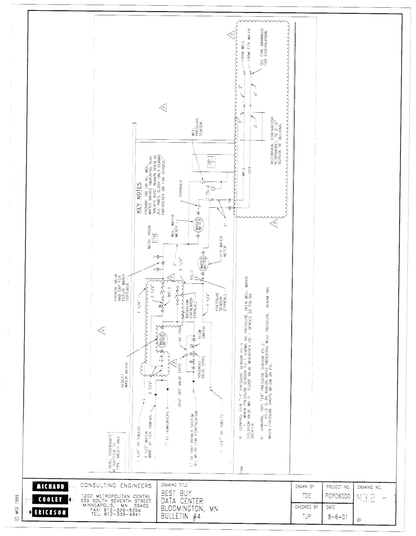
PIPE SCHEDULE							

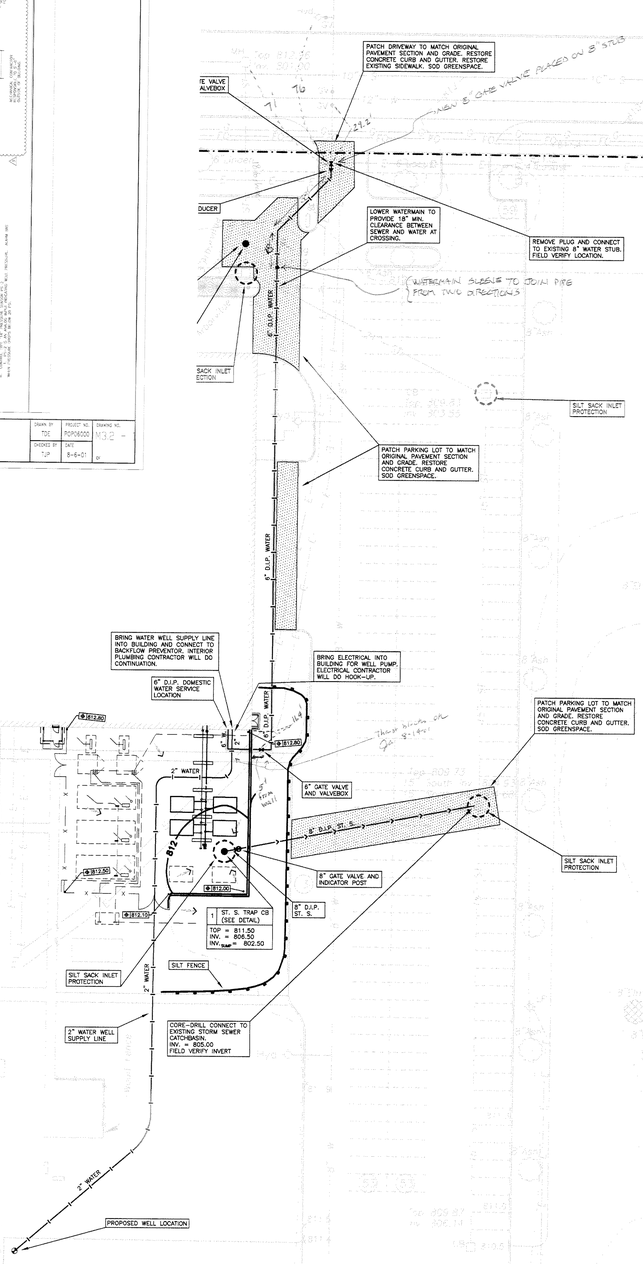
Automatic Sprinkler CORPORATION OF AMERICA
CLEVELAND, OHIO 44147 U.S.A.

		GENERAL	6/19/87	APPROVED BY	DATE	SURVEYED BY	DATE 7/1
	/ /		/ /		/ /	DRAWN BY	GK 4/9/87
	/ /		/ /		/ /	CHECKED BY	/ /
	/ /		/ /		/ /	AT MTKA	OFFICE
	/ /		/ /		/ /	SCALE- 1"= 40'-0"	
	/ /	REVISIONS	DATE		/ /	SHEET NO. 1 OF 6	

TITLE-
BEST BUY COMPANY, INC.
NESBITT RD. & W. 112TH ST.
BLOOMINGTON, MINNESOTA

NO. OF SPRINKLERS SHOWN ON THIS SHEET: 0
NO. OF SPRINKLERS ON JOB:
CONTRACT NO. 30-1679





GENERAL NOTES:

1. Existing boundary, location, topographic, and utility information shown on this plan is from a field survey by Rehder and Associates.
2. Refer to the siteplan for the most current site layout and dimensions.
3. Perform all utility work in accordance with State and City requirements.
4. Connect to existing manholes by sawcutting or coredrilling. Use saws or drills that provide water to the blade. Meet all City standards and specifications for the the connection. Reconstruct inverts after installation. Use water stop gaskets in order to provide watertight seals when penetrating a structure wall with a pipe. Take measurements before beginning construction to ensure that service connections do not cut into maintenance access structure joints or pipe barrel joints.
5. Compact backfill in all utility trenches to 95% Standard Proctor maximum dry density (ASTM D698-78 or AASHTO T-99) from the pipe zone to within 1 m (3.28 feet) below the finished subgrade, and 100% Standard Proctor maximum dry density in the final 1 m (3.28 feet). Provide density tests in backfills and fills placed beneath footings, slabs, and pavements. At least one compaction test is required for every 100 feet of trench at vertical intervals not exceeding one foot.
6. Compact all fill placed in pavement areas in accordance with MNDOT Standard Specification 2105.3.F1 (Specified Density Method). Compact all fill placed under buildings in accordance with the recommendations of the Geotechnical Engineer.
7. Perform trench excavations for all utilities in accordance with the requirements of O.S.H.A. 29 CFR, Part 1926, Subpart P, "Excavations and Trenches."
8. The locations of existing utilities shown on this plan are from record information. The Engineer does not guarantee that all existing utilities are shown or, if shown, exist in the locations indicated on the plan. It is the Contractor's responsibility to ascertain the final vertical and horizontal location of all existing utilities (including water and sewer lines and appurtenances). Notify the Engineer of any discrepancies.
9. Contact utility companies for locations of all public and private utilities within the work area prior to beginning construction. Contact GOPHER STATE ONE CALL at #651-454-0002 in the metro area, or #1-800-252-1166 toll free for exact locations of existing utilities at least 48 working hours before beginning any construction in accordance with Minnesota Statute 216D. Obtain ticket number and meet with representatives of the various utilities at the site. Provide the Owner with the ticket number information. Gopher State One Call is a free service that locates municipal and utility company lines, but does not locate private utility lines. Use an independent locator service or other means in order to obtain locations of private utility lines including, but not limited to, underground electric cables, telephone, TV, and lawn sprinkler lines.
10. Pothole to verify the positions of existing underground facilities at a sufficient number of locations in order to assure that no conflict with the proposed work exists and that sufficient clearance is available.
11. Where existing gas, electric, cable, or telephone utilities conflict with the Work, coordinate the abandonment, relocation, offset, or support of the existing utilities with the appropriate local utility companies.
12. Straight line saw-cut existing bituminous or concrete surfacing at the perimeter of pavement removal areas. Use saws that provide water to the blade. Tack, and match all connections to existing bituminous pavement.
13. Relocate power, telephone, and cable lines as required.
14. NO PARKING ON PUBLIC STREETS, CIRCULATION DRIVES, OR FIRE LANES. PREPARE ON-SITE CONSTRUCTION MANAGEMENT SPACE FOR EMPLOYEE PARKING, MATERIALS, EQUIPMENT, FIELD SHACK, AND OTHER CONSTRUCTION RELATED ITEMS. ALL CONSTRUCTION MATERIAL LOADING, UNLOADING, AND STOCKPILING TO OCCUR ON-SITE AND OFF OF PUBLIC STREETS.
15. Provide and maintain temporary drainage throughout construction until the permanent drainage system and structures are in place and operational; install temporary ditches, piping, pumps, or other means as necessary in order to insure proper drainage at all times. Provide low points at building pads or roadways with positive outfalls.
16. Protect sub grades from damage by surface water runoff.
17. When sawing or drilling concrete or masonry, use saws that provide water to the blade.
18. Adjust all valve, manhole, catchbasin and cleanout covers to finished grade.
19. Commence pipe laying at the lowest point in the proposed sewer line. Lay the pipe with the bell end or receiving groove end of the pipe pointing upgrade. When connecting to an existing pipe, uncover the existing pipe in order to allow any adjustments in the proposed line and grade before laying any pipe.
20. Install all pipe with the ASTM identification numbers on the top for inspection.

STORM DRAINAGE NOTES:

1. Unless otherwise indicated, use reinforced, precast, concrete maintenance holes and catchbasins conforming to ASTM C478, furnished with water stop rubber gaskets and precast bases. Joints for all precast maintenance hole sections shall have confined, rubber "O"-ring gaskets in accordance with ASTM C923. The inside barrel diameter shall not be less than 48 inches.
2. Reinforced concrete pipe (RCP) and fittings shall conform to ASTM C76, Design C, with circular reinforcing for the class of pipe specified. Use Class IV RCP for pipes 21" and larger. Use Class V RCP for pipes 18" and smaller. Joints shall be Bureau of Reclamation type R-4, with confined rubber "O"-ring gaskets in accordance with ASTM C361.

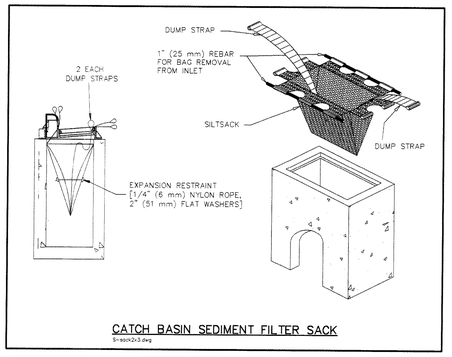
WATER DISTIBUTION SYSTEM NOTES:

1. Separation of Water and Sewer: Construct sewer and water services in accordance with Minnesota Rules part 4715.1710, support 2. Provide a minimum horizontal separation of 10 feet between all water and sewer lines. Provide a minimum separation of 18 inches at all water line and sewer line crossings.
2. Watermain Depth: Maintain 7.5 feet of cover over the top of the water lines to the finished grade. Verify elevation of proposed and existing water lines at all utility crossings. Install the water lines at greater depths in order to clear storm sewers, sanitary sewers, or other utilities as required. Include costs to lower water lines in the base bid.
3. Disinfection: Disinfect all completed water lines with water that contains at least 50 mg/l of available chlorine. Retain the treated water in the pipeline for at least 24 hours. Measure the chlorine residual at the end of the 24 hour period. The chlorine residual shall be at least 25 mg/l measured at any point in the line. Measurement of the chlorine concentration at regular intervals shall be in accordance with Standard Methods, AWWA M-12, or using appropriate chlorine test kits.
4. Water Testing: Pressure test and perform bacteriological tests on all water lines under the supervision of the City Public Works Department. Notify the City at least 24 working hours prior to any testing.
5. Polyethylene encasement is required on all ductile iron pipe.
6. Use mechanical joint restraint devices for joint restraint on all watermain bends having a vertical or horizontal deflection of 22-1/2 degrees or greater, all valves, stubs, extensions, tees, crosses, plugs, all hydrant valves, and all hydrants in accordance with City requirements. Use "Series 1100 Megalug" manufactured by EBAA Iron Inc., Eastland, Texas, or approved equal, installed in accordance with manufacturer's recommendations for restraint on Ductile Iron Pipe.
7. At all valve locations which require a 12" or smaller valve, install gate valves which are of the compression resilient seated (CRS) type. Use 80-CRS series gate valve as manufactured by American Valve and Hydrant, Waterous 500 series gate valve, or approved equal. Gate valves shall conform to AWWA C509. Install cast iron valve boxes conforming to ASTM A48 at each valve location. Valve boxes shall be the three-piece type with 5-1/4" shafts. Use Tyler 6860-G with No. 6 base, or equivalent. Valve boxes shall have at least 6" of adjustment above and below finished grade. Drop covers on valve boxes shall be round and bear the word "WATER" cast on the top. Use Tyler 6860-G "Slayput" covers with extended skirt, or equivalent.
8. Use Class 55 DIP for all 6" diameter watermain.
9. Extend water services into the building and install flange 1' above the finished floor.

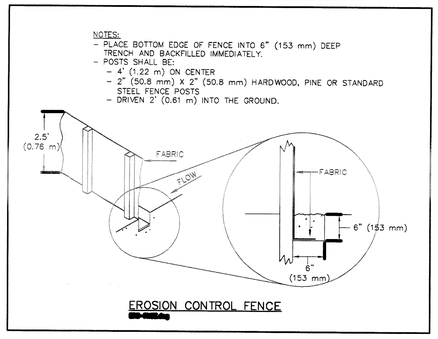
EROSION AND SEDIMENTATION CONTROL NOTES:

1. Install all temporary erosion control measures including silt fence at perimeter of construction and silt sacks prior to beginning site clearing and grading.
2. Install silt fence with a post spacing of 1.2 m (4 feet) or less. Drive posts at least 0.6 m (2 feet) into the ground. Anchor the silt fence fabric in a trench at least 152 mm (6 inches) deep and 152 mm (6 inches) wide dug on the uphill side of the support posts. Lay the fabric in the trench and then backfill and compact with a vibratory plate compactor. Make any splices in the fabric at a fence post. At splices, overlap the fabric at least 152 mm (6 inches), fold it over, and securely fasten it to the fence post. Silt fence supporting posts shall be 51 mm (2 inch) square or larger hardwood, pine, or standard T- or U-section steel posts. T- or U-section steel posts shall weigh not less than 0.45 kg (1.0 lb) per lineal foot. Posts shall have a minimum length of 762 mm (30 inches) plus burial depth. Geotextile fabric shall meet the requirements of MNDOT Standard Specification 3886 for self supporting silt fence. Furnished in a continuous roll in order to avoid splices.
3. Prior to beginning site clearing and grading, protect all storm sewer inlets that receive runoff from disturbed areas. Seal all storm sewer inlets that are not needed for site drainage during construction in order to prevent sediment from entering the storm sewer system. Protect all other storm sewer inlets by installing silt sacks. Protect new storm sewer inlets as they are completed.
4. Clean the wheels of construction vehicles in order to remove soils before the vehicles leave the construction site. Wash vehicles only on an area stabilized with stone that drains into an approved sediment trapping device.
5. Remove all soils and sediments tracked or otherwise deposited onto pavement areas, sidewalks, streets, and alleys. Removal shall be on a daily basis throughout the duration of the construction. Clean paved roadways by shoveling or wet-sweeping. Do not dry sweep. If necessary, scrape paved surfaces in order to loosen compacted sediment material prior to sweeping. Haul sediment material to a suitable disposal area. Street washing is allowed only after sediment has been removed by shoveling or sweeping.
6. Maintain all temporary erosion and sediment control devices in place until the contributing drainage area has been stabilized (hard-surfaced areas paved and vegetation established in greenspace). Inspect all temporary erosion and sediment control devices on a daily basis. Remove accumulated sediment deposits from behind erosion and sediment control devices as needed. Do not allow sediment to accumulate to a depth of more than one-half of the height of the erosion and sediment control devices. Immediately replace deteriorated, damaged, ratted, or missing erosion control devices.
7. Install and maintain all soil erosion measures, sediment control facilities, and vegetation in accordance with the methods outlined in the best mgmagement practices handbook: "Protecting Water Quality in Urban Areas," published by the Minnesota Pollution Control Agency.
8. Clean storm sewer catchbasins and other drainage facilities as required in order to maintain their effectiveness.
9. Provide sediment control during utility construction.

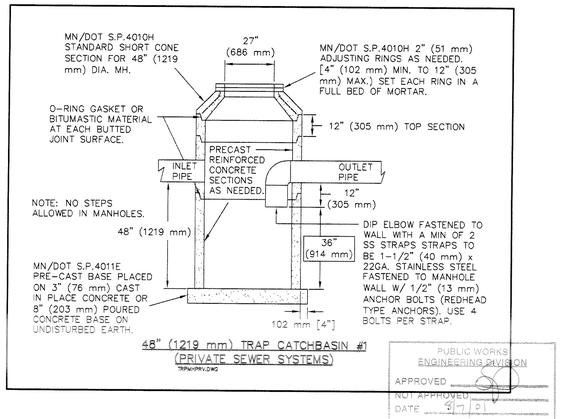
STORM SEWER SCHEDULE			
NO.	TYPE	CASTING	BARREL
CB 1	RADIAL	NEENAH R-1733	4" DIA.
MH 2	SOLID, TYPE 'B'	NEENAH R-1733	6" DIA.



CATCH BASIN SEDIMENT FILTER SACK

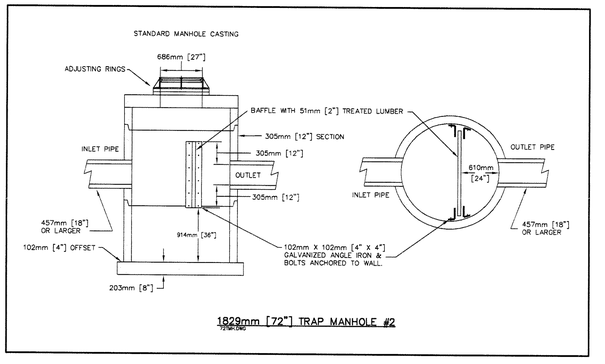


EROSION CONTROL FENCE

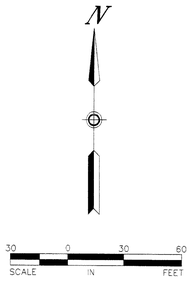


48" (1219 mm) TRAP CATCHBASIN #1 (PRIVATE SEWER SYSTEMS)

PUBLIC WORKS ENGINEERING DIVISION
APPROVED
NOT APPROVED
DATE 4/7/01



1829mm [72"] TRAP MANHOLE #2



NATIONWIDE NUMBER 1-888-258-0808
CALL BEFORE YOU DIG

#01 - 620 BNF 01620C10.dwg

POPE ASSOCIATES
ARCHITECTS
INTERIOR DESIGNERS
1255 ENERGY PARK DRIVE
ST. PAUL, MN 55108-5118
PH (651) 642-9200
FAX (651) 642-1101

BEST BUY

BEST BUY DATA CENTE

BLOOMINGTON, MINNESOTA

MORTENSON

SUNDE ENGINEERING INC.
CONSULTING CIVIL ENGINEERS
4200 WEST OLD SHAKOPEE ROAD-SUITE 200
BLOOMINGTON, MINNESOTA 55437
(952) 881-3344 TELEPHONE
(952) 881-1913 FAX
www.sundecivil.com

DRAWING ISSUE FOR:

DATE:	PKG.	
4/2/01	#7	CIVIL WORK
4/2/01	#8	CONTRACT SET
4/6/01	#9	CONSTRUCTION SET
4/27/01	#10	CONSTRUCTION SET (REV. 1)
5/29/01	#11	CONSTRUCTION SET (BULLETIN #2)
8/2/01	#12	CONSTRUCTION SET (BULLETIN #4)

GRADING, UTILITY AND EROSION CONTROL PLAN

Revisions	
4/6/01	RELOCATE WATER SERVICE
4/19/01	RELOCATE WELL
4/27/01	RELOCATE WELL AND WATER SERVICE AND NEW MECH. YARD
5/29/01	CITY COMMENTS
7/11/01	TRAP MH1/CB
8/2/01	WELL LOCATION, WATERMAIN, ST. S. AND CB LOCATION

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.

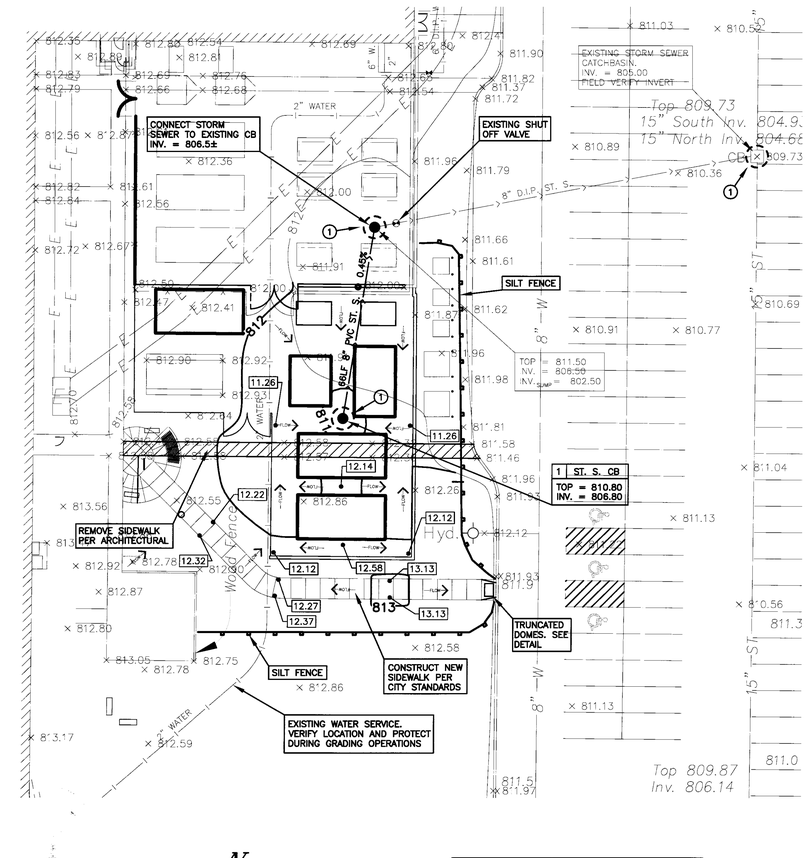
Gerald M. Sunde
Date: 08/01/01 Lic. No. 4334

Commission No.:	55671-01012
Drawn by:	BNF
Checked by:	BHM
Date:	04/02/01

SHEET

RECEIVED
AUG 1 2001
City of Bloomington
Services Section

1 OF 1



KEYNOTES:

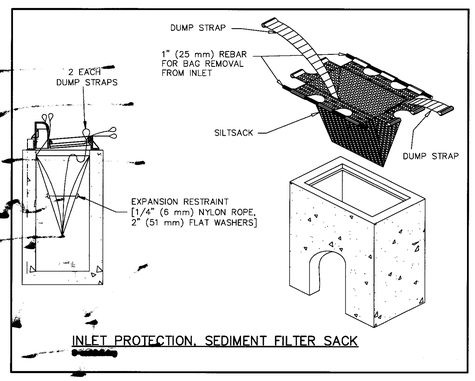
① PROVIDE SILT SACK INLET PROTECTION PER DETAIL ON SHEET C2

STORM SEWER SCHEDULE			
NO.	TYPE	CASTING	BARREL
CB 1	RADIAL	NEENAH R-1733	4' DIA.

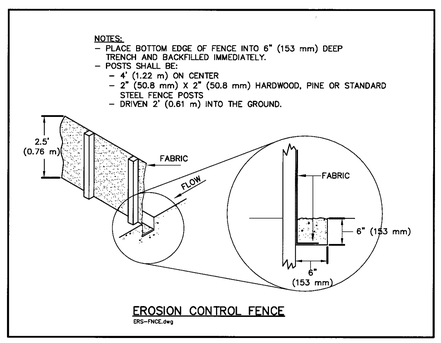
CALL BEFORE YOU DIG

1-888-258-0808 NATIONWIDE

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."



INLET PROTECTION, SEDIMENT FILTER SACK



EROSION CONTROL FENCE

ERS-FNCE.dwg

GENERAL:

1. Comply with the work safety practices specified by the Occupational Safety and Health Administration (OSHA). Comply with all applicable local, state, and federal safety regulations. OSHA prohibits entry into "confined spaces," such as manholes and inlets (see 29 CFR Section 1910.146), without undertaking certain specific practices and procedures. Construction safety is solely the responsibility of the Contractor, who is also solely responsible for the means, methods, and sequencing of the construction operations.
2. Existing boundary, location, topographic, and utility information shown on this plan is from old construction documents and archive information obtained from the City. The base information shown is not a survey. All existing conditions must be field verified prior to construction.
3. Refer to the architectural plans for building and stoop dimensions, site layout and dimensions, pavement sections and details, striping, and other site features.
4. Perform all construction work in accordance with State and Local requirements.
5. A licensed surveyor shall perform construction staking. The Contractor shall provide and be responsible for the staking. Verify all plan and detail dimensions prior to construction staking. Stake the limits of walkways and curbing prior to valvebox, maintenance hole, and catchbasin installation. Adjust valvebox and maintenance hole locations in order to avoid conflicts with curb and gutter. Adjust catchbasin locations in order to align properly with curb and gutter.
6. Provide temporary fences, barricades, coverings, and other protections in order to preserve existing items to remain, and to prevent injury or damage to person or property.
7. Perform trench excavations for all utilities in accordance with the requirements of O.S.H.A. 29 CFR, Part 1926, Subpart P, "Excavations and Trenches." Sloping or benching for excavations greater than 20 feet deep must be approved by a registered professional engineer. (www.osha.gov)
8. The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."
9. The locations of existing utilities shown on this plan are from record information. The Engineer does not guarantee that all existing utilities are shown or, if shown, exist in the locations indicated on the plan. It is the Contractor's responsibility to ascertain the final vertical and horizontal location of all existing utilities (including water and sewer lines and appurtenances). Notify the Engineer of any discrepancies.
10. Contact utility companies for locations of all public and private utilities within the work area prior to beginning construction. Contact GOPHER STATE ONE CALL at (651) 454-0002 in the Minneapolis/St. Paul metro area, or 1-800-252-1166 elsewhere in Minnesota for exact locations of existing utilities at least 48 working hours (not including weekends and holidays) before beginning any construction in accordance with Minnesota Statute 216D. Obtain ticket number and meet with representatives of the various utilities at the site. Provide the ticket number information. Gopher State One Call is a free service that locates municipal and utility company lines, but does not locate private utility lines. Use an independent locator service or other means in order to obtain locations of private utility lines including, but not limited to, underground electric cables, telephone, TV, and lawn sprinkler lines.
11. Pothole to verify the positions of existing underground facilities at a sufficient number of locations in order to assure that no conflict with the proposed work exists and that sufficient clearance is available.
12. Where existing gas, electric, cable, or telephone utilities conflict with the Work, coordinate the abandonment, relocation, offset, or support of the existing utilities with the appropriate local utility companies. Coordinate new gas meter and gas line installation, electric meter and electric service installation, cable service, and telephone service installation with the local utility companies.
13. Arrange for and secure suitable disposal areas off-site. Dispose of all excess soil, waste material, debris, and all materials not designated for salvage. Waste material and debris includes trees, stumps, pipe, concrete, asphaltic concrete, cans, or other waste material from the construction operations. Obtain the rights to any waste area for disposal of unsuitable or surplus material either shown or not shown on the plans. All work in disposing of such material shall be considered incidental to the work. All disposal must conform to applicable solid waste disposal permit regulations. Obtain all necessary permits at no cost to the OWNER.
14. Straight line saw-cut existing bituminous or concrete surfacing at the perimeter of pavement removal areas. Use saws that provide water to the blade. Tack, and match all connections to existing bituminous pavement.
15. Relocate overhead power, telephone, and cable lines as required. Abandon and report existing on-site wells and septic systems in accordance with Minnesota Department of Health (MDH) requirements.
16. All materials required for this work shall be new material conforming to the requirements for class, kind, grade, size, quality, and other details specified herein or as shown on the Plans. Do not use recycled or salvaged aggregate, asphaltic pavement, crushed concrete, or scrap shingles. Unless otherwise indicated, the Contractor shall furnish all required materials.
17. Provide and maintain temporary drainage throughout construction until the permanent drainage system and structures are in place and operational. Install temporary ditches, piping, pumps, or other means as necessary in order to insure proper drainage at all times. Provide low points at building pads or roadways with positive outfalls.
18. Protect sub grades from damage by surface water runoff.
19. When sawing or drilling concrete or masonry, use saws that provide water to the blade. Do not allow the slurry produced by this process to be tracked outside of the immediate work area or discharged into the sewer system.
20. Adjust all curb stops, valve boxes, maintenance hole castings, catchbasin castings, cleanout covers, and similar items to finished grade.
21. Install all pipe with the ASTM identification numbers on the top for inspection. Commence pipe laying at the lowest point in the proposed sewer line. Lay the pipe with the bell end or receiving groove end of the pipe pointing upgrade. When connecting to an existing pipe, uncover the existing pipe in order to allow any adjustments in the proposed line and grade before laying any pipe. Do not lay pipes in water or when the trench conditions are unsuitable for such work.
22. Obtain and pay for all permits, tests, inspections, etc. required by agencies that have jurisdiction over the project. The Contractor is responsible for all bonds, letters of credit, or cash sureties related to the work. Execute and inspect work in accordance with all local and state codes, rules, ordinances, or regulations pertaining to the particular type of work involved.
23. Measure pipe lengths from center-of-structure to center-of-structure, or to the end of aprons.
24. Insulate utility lines at locations indicated on the plans. Provide a minimum insulation thickness of 4 inches. The insulation must be at least 4 feet wide and centered on the pipe. Install the insulation boards 6 inches above the tops of the pipes on mechanically compacted and leveled pipe bedding material. Use high density, closed cell, rigid board material equivalent to DOW Styrofoam Highload 40 Polystyrene Insulation. Individual insulation board dimensions typically measure 4' wide by 8' long by 2" thk.
25. Construct sanitary sewer, watermain, and storm sewer utilities in accordance with the City of Bloomington Standard Specifications for Construction and the City Engineer's Association of Minnesota Standard Specifications sections 2600, 2611, and 2621 dated 1999, or the latest revised edition.
26. Compact 3" of Class 5 Aggregate Base into place below all proposed curb and gutter.
27. Notify Centerpointe Energy of the date and location of the preconstruction meeting so that a Centerpointe Energy representative can attend. Contact Mr. Ron Wilson at (612-861-8439.
28. Notify Centerpointe Energy prior to beginning excavation so that a Centerpointe Energy inspector can be on-site while work near the gas lines is proceeding.
29. These plans, prepared by Sunde Engineering, Inc., do not extend to or include systems pertaining to the safety of the construction contractor or its employees, agents, or representatives in the performance of the work. The seal of Sunde Engineering's registered professional engineer hereon does not extend to any such safety systems that may nor or hereafter be incorporated into these plans. The construction contractor shall prepare or obtain the appropriate safety systems which may be required by U.S. Occupational Safety and Health Administration (OSHA) and/or local regulations.
30. Perform all grading, base construction, pavement construction, and miscellaneous construction in accordance with the Standard Specifications for Highway Construction of the Minnesota Department of Transportation 2005 and all subsequent amendments thereto; provided, that the provisions for measurement and payment do not apply to the work of this Contract.

EROSION CONTROL:

1. Install all temporary erosion control measures, including silt fence at perimeter of construction, rock construction entrances, sediment filters, silt socks, and sedimentation basins prior to beginning site clearing, grading, or other land-disturbing activity.
2. Prior to beginning site clearing and grading, protect all storm sewer inlets that receive runoff from disturbed areas. In order to prevent sediment from entering the storm sewer system, seal all storm sewer inlets that are not needed for site drainage during construction. Protect all other storm sewer inlets by installing sediment control devices, silt socks, or staked silt fence. Straw bales or fabric under the grates are not acceptable forms of inlet protection. Protect new storm sewer inlets as they are completed. Maintain storm sewer inlet protection in place until all sources with potential for discharging to the inlets are stabilized.
3. Approved Inlet Sediment Control Devices:

   Road Drain Top Slab Model RD 23 (fits rough opening for 2'x3' inlet), Road Drain Top Slab Model RD 27 (fits rough opening for 27" inlet), or Road Drain Top Slab Model CC 3067 (fits Neenah Casting with 35-1/4"x17-3/4" dimensions) manufactured by WIMCO, 799 Theis Drive, Shakopee, MN, 55379, Phone (952) 233-3055.

   Silt Sack manufactured by ACF ENVIRONMENTAL, 2831 Cardwell Road, Richmond, VA, 23234, Phone (800) 448-3638.

   InfraSafe Sediment Control Barrier. Install geotextile sock on the outside of the barrier in order to trap additional fines. Standard frames are available to fit 24" to 30" diameter and 2'x3' openings. Distributed by ROYAL ENTERPRISES AMERICA, 30622 Forest Boulevard, Stacy, MN, 55079, Phone (651) 462-2130.

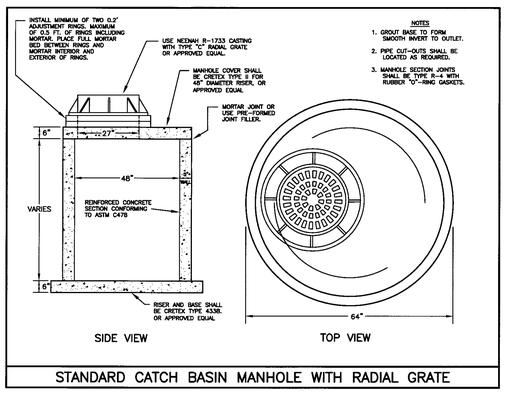
   Ridge Bag Rock Log. Use rock logs only for curb inlets after pavement is in place. Manufactured by RED BARN RIDGE, 3135 County Road 136, Saint Cloud, MN, 55301, Phone (320) 253-3744.
4. Install silt fence along the contour (on a level horizontal plane) with the ends turned up (J-hooks) in order to help pond water behind the fence. Install the silt fence on the uphill side of the support posts. Provide a post spacing of 1.2 m (4 feet) or less. Drive posts at least 0.6 m (2 feet) into the ground. Anchor the silt fence fabric in a trench at least 152 mm (6 inches) deep and 152 mm (6 inches) wide dug on the upslope side of the support posts. Lay the fabric in the trench and then backfill and compact with a vibratory plate compactor. Make any splices in the fabric at a fence post. At splices, overlap the fabric at least 152 mm (6 inches), fold it over, and securely fasten it to the fence post. Silt fence supporting posts shall be 51 mm (2 inch) square or larger hardwood, pine, or standard T- or U-section steel posts. T- or U-section steel posts shall weigh not less than 1.8lb2 kg per meter (1.25 lb per lineal foot). Posts shall have a minimum length of 1524 mm (5 feet). Posts shall have projections to facilitate fastening the fabric and preventing slippage. Geotextile fabric shall meet the requirements of MNDOT Standard Specification 3886 for preassembled silt fence, furnished in a continuous roll in order to avoid splices. Geotextile fabric shall be uniform in texture and appearance and have no defects, flaws, or tears. The fabric shall contain sufficient ultraviolet (UV) ray inhibitor and stabilizers to provide a minimum two-year service life outdoors. Fabric color shall be international orange.
5. Before beginning construction, install a TEMPORARY ROCK CONSTRUCTION ENTRANCE at each point where vehicles exit the construction site. Use 25 mm (1 inch) to 50 mm (2 inch) diameter rock, MNDOT Standard Specification 3137 CA-1, CA-2, CA-3, or equal Coarse Aggregate. Place the aggregate in a layer at least 152 mm (6 inches) thick across the entire width of the entrance. Extend the rock entrance at least 15 m (50 feet) into the construction zone. Use a MNDOT Standard Specification 3733 Type V permeable geotextile fabric material beneath the aggregate in order to prevent migration of soil into the rock from below. Maintain the entrance in a condition that will prevent tracking or flowing of sediment onto paved roadways. Provide periodic top dressing with additional stone as required. Close entrances not protected by temporary rock construction entrances to all construction traffic.
6. Clean the wheels of construction vehicles in order to remove soils before the vehicles leave the construction site. Wash vehicles only on an area stabilized with stone that drains into an approved sediment trapping device.
7. Remove all soils and sediments tracked or otherwise deposited onto adjacent property, pavement areas, sidewalks, streets, and alleys. Removal shall be on a daily basis throughout the duration of the construction. Clean paved roadways by shoveling or wet-sweeping. Do not dry sweep. If necessary, scrape paved surfaces in order to loosen compacted sediment material prior to sweeping. Haul sediment material to a suitable disposal area. Street washing is allowed only after sediment has been removed by shoveling or sweeping.
8. Following initial soil disturbance or redisturbance, complete permanent or temporary stabilization against erosion due to rain, wind, and running water within 7 calendar days on all perimeter dikes, swales, ditches, perimeter slopes, and slopes greater than 3:1 (3 horizontal to 1 vertical), and embankments on ponds and basins. Complete permanent or temporary stabilization within 14 calendar days on all other disturbed or graded areas. This requirement does not apply to those areas that are currently being used for material storage or for those areas on which grading, site building, or other construction activities are actively underway. Provide temporary grass seed cover on all stacked topsoil piles, and other areas of stockpiled excavated material in order to prevent soil erosion and rapid runoff during the construction period. Prolonged periods of open, bare earth without grass cover will not be permitted. Stabilize all disturbed greenspace areas with a minimum of 4" topsoil immediately after final subgrade completion. Seed and mulch, or sod and stake these areas within 48 hours after completion of final grading work (weather permitting). Stabilize all disturbed areas to be paved using early application of gravel base. Stabilize the normal wetted perimeter of any temporary or permanent drainage ditch that conveys water from the construction site, or diverts water around the construction site, within 200 lineal feet from the property edge, or within 200 feet from the point of discharge to any surface water. Stabilize temporary or permanent drainage ditches within 24 hours of connecting to a surface water. Provide pipe outlets with temporary or permanent energy dissipation within 24 hours of connection to a surface water.
9. Water and maintain seeded or sodded areas on a timely day-to-day basis. In the event of a seeding failure, reseed and remulch the areas where the original seed has failed to grow and perform additional watering as necessary at no additional cost to the Owner. Promptly replace all sod that dries out to the point where it is presumed dead and all sod that has been damaged, displaced, weakened, or heavily infested with weeds at no additional cost to the Owner.
10. Inspect all erosion and sediment control devices, stabilized areas, and infiltration areas on a daily basis until land-disturbing activity has ceased. Thereafter, inspect at least on a weekly basis until vegetative cover is established. Inspect all erosion and sediment control devices, stabilized areas, and infiltration areas within 24 hours after a rainfall event greater than 0.5 inches in 24 hours. Remove accumulated sediment deposits from behind erosion and sediment control devices as needed. Do not allow sediment to accumulate to a depth of more than one-third of the height of the erosion and sediment control devices. Immediately replace deteriorated, damaged, rotted, or missing erosion control devices. Document inspections and dates of rainfall events. Maintain a written log of all inspection, maintenance, and repair activities related to erosion and sediment control facilities.
11. In areas to be permanently seeded, use native seed mixture equivalent to MNDOT No. 350. Apply seed mixture at a rate of 94.7 kg per hectare (84.5 lbs per acre) in accordance with MNDOT Standard Spec. 2575. Incorporate a fertilizer (slow release type with 10 week residual) consisting of 23-0-30 (KN-P-K) into the soil at an application rate of 224 kg per hectare (200 lbs per acre) by disking prior to seeding.
12. Establish native seed mix in accordance with MNDOT Standard Spec. 2575.3. Use a Truax type, or equal interseeder drill with at least two seed boxes: a small/fine seed box and a large/fluffy seed box. Drill large/fluffy seeds to a final planting depth of 10 mm (1/2 inch) to 25 mm (1 inch) deep from the large/fluffy seed box. Split the drill rates in half and make two passes over the site in order to decrease competition in drill rows. Scatter small/fine seeds over the soil surface by drop-seeding from the small/fine seed box, or broadcast. Coordinate with the seed vendor to keep the large/fluffy seeds separate from the small/fine seeds so that they may be installed from separate seed boxes. Lightly harrow or rake the site following the seeding operation. Pack the site following harrowing in order to ensure a firm seed-bed.
13. Comply with the requirements of MNDOT Standard Spec. Table 2575-2 for season of planting native seed mixtures. The appropriate dates for spring seeding are from April 15 through July 20. Fall seeding dates are from September 20 to October 20. Dormant seeding dates are from October 20 to November 15. Dormant seeding will only be allowed if the maximum soil temperature at a depth of 25 mm (1 inch) does not exceed 10 degrees C (50 degrees F) in order to prevent germination.
14. In areas to be permanently stabilized, landscape with decorative rock, plantings, and sod (refer to Landscape Plan for design and details).
15. Install siltfence, or other effective sediment controls, around all temporary soil stockpiles. Locate soil or dirt stockpiles containing more than 10 cubic yards of material such that the downslope drainage length is no less than 8 m (25 feet) from the toe of the pile to a roadway or drainage channel. If remaining for more than seven days, stabilize the stockpiles by mulching, vegetative cover, tarps, or other means. Control erosion from all stockpiles by placing silt fence barriers around the piles. During street repair, cover construction soil or dirt stockpiles located closer than 8 m (25 feet) to a roadway or drainage channel with tarps, and protect storm sewer inlets with silt socks or staked siltfence.
16. Maintain all temporary erosion and sediment control devices in place until the contributing drainage area has been stabilized (hard-surfaced areas paved and vegetation established in greenspace). Repair any rilling, gully formation, or washouts. After final establishment of permanent stabilization, remove all temporary synthetic, structural, and nonbiodegradable erosion and sediment control devices and any accumulated sediments. Dispose-of off site. Restore permanent sedimentation basins to their design condition immediately following stabilization of the site.
17. Clean sedimentation basins, storm sewer catchbasins, ditches, and other drainage facilities as required in order to maintain their effectiveness.
18. Apply necessary moisture to the construction area and haul roads to prevent the spread of dust.
19. Install and maintain all soil erosion measures, sediment control facilities, and vegetation in accordance with the methods outlined in the best management practices handbook: "Protecting Water Quality in Urban Areas," current revision, published by the Minnesota Pollution Control Agency, November 1, 2002.

SITE GRADING:

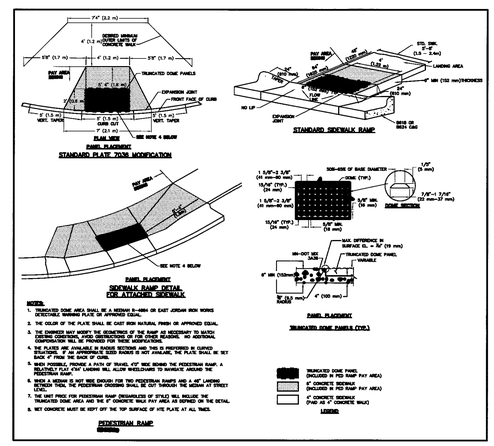
1. Visit the site. Become familiar with the site and existing site conditions including available soil reports. Examine all local conditions at the site, and assume responsibility as to the grades, contours, and the character of the earth, existing conditions, and other items that may be encountered during excavation work above or below the existing grades. Review the drawings and specifications covering this work and become familiar with the anticipated site conditions.
2. Unless otherwise noted, all proposed grades shown are finished grades. Finished grades at points between spot elevations or contours are determined by uniform slopes between the given grades. All proposed spot elevations shown at curblines are to bottom of curb (gutterline) unless otherwise indicated.
3. At locations where new work connects to existing work, field verify existing elevations and grades prior to beginning the new work. Match existing grades at construction limits.
4. Compact backfill in all utility trenches to 95% Standard Proctor maximum dry density (ASTM D698-78 or AASHTO T-99) from the pipe zone to within 1 m (3.28 feet) below the finished subgrade, and 100% Standard Proctor maximum dry density in the final 1 m (3.28 feet). Provide density tests in backfills and fills placed beneath footings, slabs, and pavements. At least one compaction test is required for every 100 feet of trench at vertical intervals not exceeding one foot.
5. Comply with the requirements of O.S.H.A. 29 CFR, Part 1926, Subpart P, "Excavations and Trenches." (www.osha.gov)
6. Construct all proposed sideslopes with grades not exceeding 3:1 (3 horizontal to 1 vertical), unless otherwise indicated.
7. Provide positive drainage away from buildings at all times.
8. Subcut 12 inches below the proposed subgrade and backfill with select granular borrow material (MNDOT SPEC. 3149.2.B) in the pavement and building areas.
9. Provide minimum 3 feet of granular material under all future bituminous pathways, path shoulders, bituminous roadways, concrete, and special pavements.
10. In areas where the proposed grade adjacent to the curb line slopes upward or downward, grade the first 3 feet of lawn area parallel to the curb line at a 20:1 slope before making the transition to 3:1.
11. Conduct all grading operations in a manner that minimizes the potential for site erosion.
12. Grade the site to the finished elevations shown on the plan. Import embankment material, or remove and dispose of excess excavation material as required. Provide waste areas or disposal sites for excess material including, but not limited to, excavated material or borrow which is not desirable to be incorporated into the work involved on this project. Determination of material import and export quantities is solely the responsibility of the Contractor and the cost of material import and export is incidental to the contract.
13. It is typical to abbreviate spot elevations. Elevations shown as 12.8 or 12.1 are understood to mean 812.8 or 812.1 respectively.

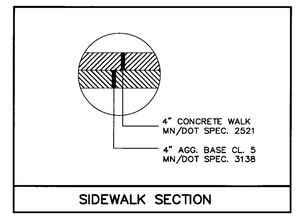
STORM DRAINAGE:

1. Unless otherwise indicated, use reinforced, precast, concrete maintenance holes and catchbasins conforming to ASTM C478, furnished with water stop rubber gaskets and precast bases. Joints for all precast maintenance hole sections shall have confined, rubber "O"-ring gaskets in accordance with ASTM C923. The inside barrel diameter shall not be less than 48 inches.
2. All joints to catchbasins or MH's shall be watertight. Use resilient rubber seals, waterstop gaskets, or approved equal. Cement mortar joints are not allowed.
3. PVC Pipe: Use solid-core, SDR-35, ASTM D3034 Polyvinyl Chloride (PVC) Pipe for designated PVC storm sewer services 4 to 15-inches in diameter. Use solid-core, SDR-35, ASTM F679 Polyvinyl Chloride (PVC) pipe for designated PVC storm sewer services 18 to 27-inches in diameter. Joints for all storm sewer shall have push-on joints with elastomeric gaskets. Use of solvent cement joints is allowed for building services. Solvent cement joints in PVC pipe must include use of a primer which is of contrasting color to the pipe and cement in accordance with Minnesota Rules, part 4715.0810, subpart 2. Pipe with solvent cement joints shall be joined with PVC cement conforming to ASTM D2564. Lay all PVC pipe on a continuous granular bed. Installation must comply with ASTM D2321.
4. Testing: Test all portions of storm sewer that are within 10 feet of buildings, within 10 feet of buried water, lines, within 50 feet of water wells, or that pass through soil or water identified as being contaminated in accordance with the Minnesota Rules part 4715.2820. Test all flexible storm sewer lines for deflection after the sewer line has been installed and backfill has been in place for at least 30 days. No pipe shall exceed a deflection of 5%. If the test fails, make necessary repairs and retest.
5. Use a Neenah R-1733 frame with Type "C" radial grate, or approved equal, on CB #1.
6. **Install detectable underground marking tape directly above all pvc, polyethylene, and other nonconductive underground utilities at a depth of 457 mm (18 inches) below finished grade, unless otherwise indicated. Bring the tape to the surface at various locations in order to provide connection points for locating underground utilities. Install blue Rhino TriView Flex Test Stations, or approved equal, with black caps at each surface location.**
7. If the pipe spring line is less than 48 inches below the finished grade, place granular material beneath the pipe to a minimum of 48 inches below finished grade.
8. Contact Utilities Division (952-563-8777) regarding permit for storm water.



STANDARD CATCH BASIN MANHOLE WITH RADIAL GRATE





SIDEWALK SECTION

POPE ARCHITECTS

POPE ASSOCIATES INC.
1255 ENERGY PARK DRIVE
ST. PAUL, MN 55108-5118
PH. (651) 642-9200
FAX (651) 642-1101

BEST BUY DATA CENTER GENSET ADDITION

BLOOMINGTON, MN

BEST BUY

MORTENSON

Sunde Engineering, PLLC.

CONSULTING CIVIL ENGINEERS
10830 NESBITT AVENUE SOUTH
BLOOMINGTON, MINNESOTA 55437-3100
(952) 881-3344 TELEPHONE
(952) 881-1913 FAX
www.sundecivil.com

PUBLIC WORKS ENGINEERING DIVISION
Approved
Not Approved
Date 5/6/08

GRADING, UTILITY AND EROSION CONTROL PLAN

Issues and Revisions:	
CITY SUBMITTAL	04/11/08
CITY COMMENTS	05/01/08

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

MIKE R. KETTLER
Date 05/01/08 Lic. # 40425

Commission No.	55671-08043
Drawn by	RCS
Checked by	MRK

SHEET

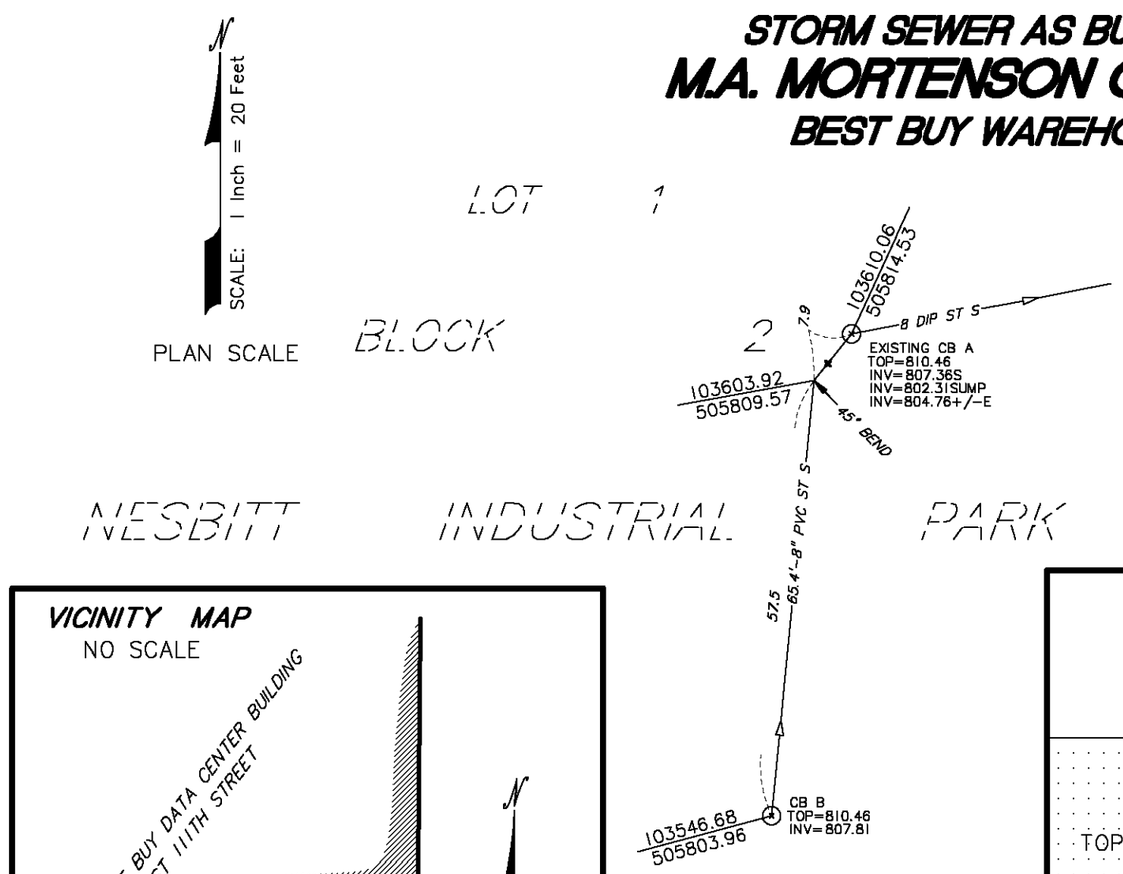
C1

1 OF 1

STORM SEWER AS BUILT FOR:
M.A. MORTENSON COMPANY
BEST BUY WAREHOUSE

SCALE: 1 Inch = 20 Feet

PLAN SCALE



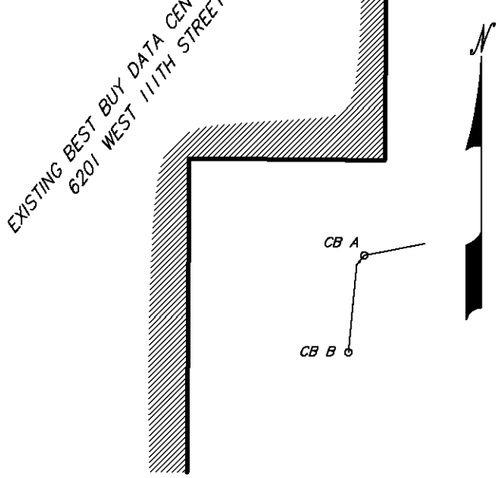
UTILITY CONTRACTOR:

Frattalone Companies
3205 Spruce Street
St. Paul, MN 55117
Phone: 651-484-0448

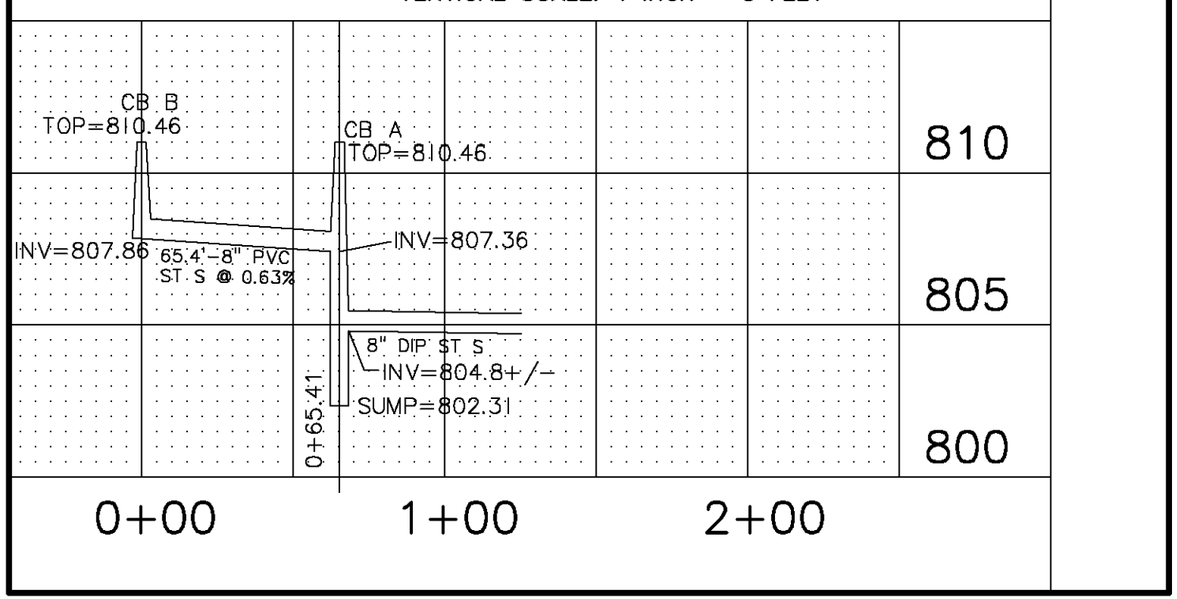
NOTES:

1. The locations of existing utilities shown on this plan are from record information. The Engineer does not guarantee that all existing utilities are shown or, if shown, exist in the locations indicated on the plan. It is the Contractor's responsibility to ascertain the final vertical and horizontal location of all existing utilities (including water and sewer lines and appurtenances). Notify the Engineer of any discrepancies.
2. Contact utility companies for locations of all public and private utilities within the work area prior to beginning construction. Contact GOPHER STATE ONE CALL at 651-454-0002 in the metro area, or 1-800-252-1166 toll free for exact locations of existing utilities at least 48 working day hours before beginning any construction. Obtain ticket number and meet with representatives of the various utilities at the site. Provide the Owner with the ticket number information.
3. Installation of utilities shown hereon was May, 2008 by Frattalone Companies.
4. Coordinate basis: Hennepin County.

VICINITY MAP
NO SCALE



HORIZONTAL PROFILE SCALE: 1 INCH = 50 FEET
VERTICAL SCALE: 1 INCH = 5 FEET



BENCHMARKS
(City of Bloomington-NGVD 1929)

City of Bloomington BM #77-007: Top of top nut of 1st fire hydrant north of W. 111th Street on west side Nesbitt. Elevation = 806.71 feet.

City of Bloomington BM #77-010: Top of top nut of SE corner rear P/L 11001 Hampshire Ave. S. Elevation = 803.07 feet.

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Dated this 20th day of June, 2008

SUNDE LAND SURVEYING, LLC.

By: _____
Arlee J. Carlson, P.L.S. Minn. Lic. No. 44900

87-048-M 796/09, 183/45 T.115, R.21, S.05 87048M01.dwg TLS

SUNDE LAND SURVEYING
www.sunde.com

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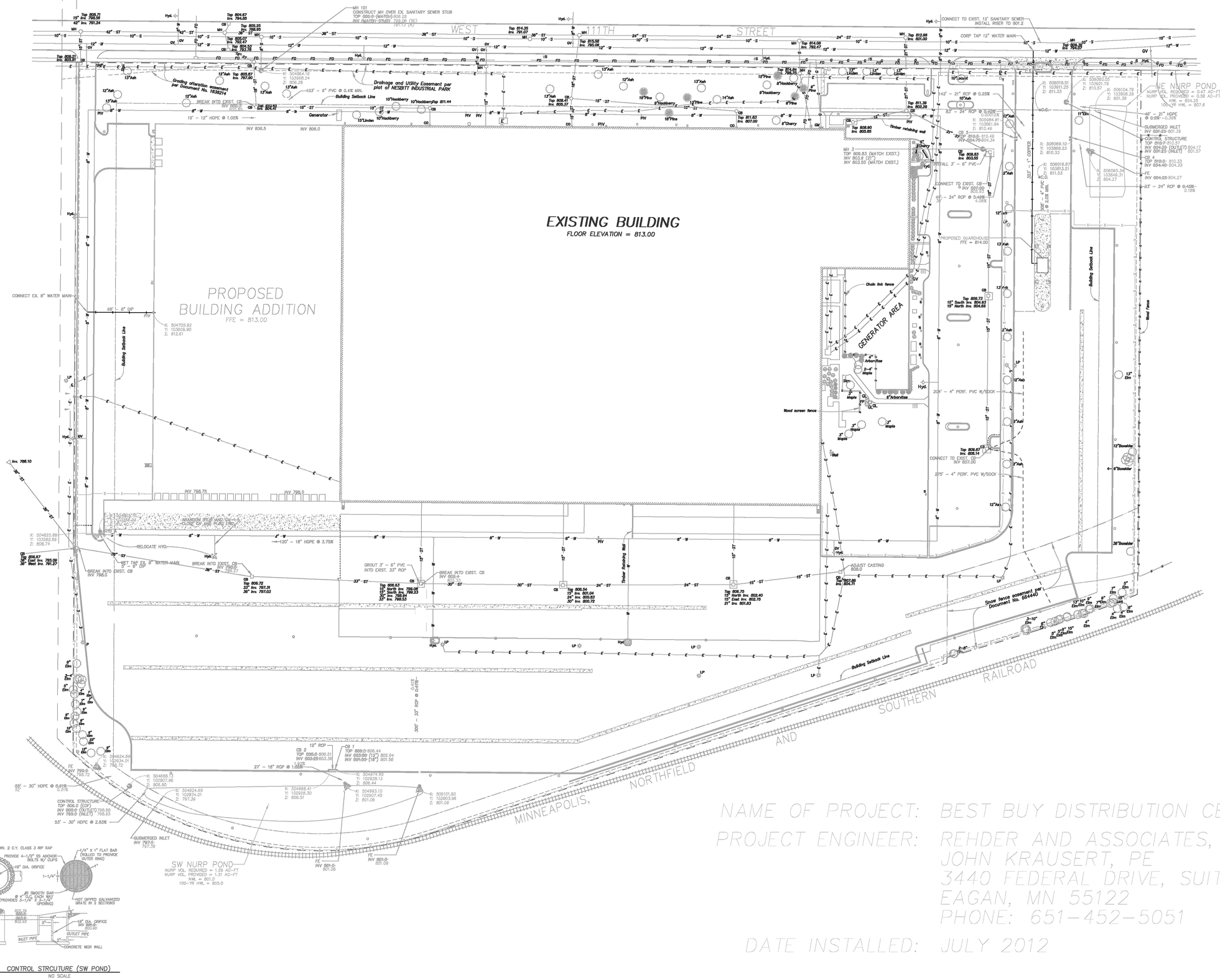
9001 East Bloomington Freeway (35W) ▪ Suite 118
Bloomington, Minnesota 55420-3435
952-881-2455 (Fax: 952-888-9526)
North Office:
Brooklyn Park, Minn. 763-784-9346

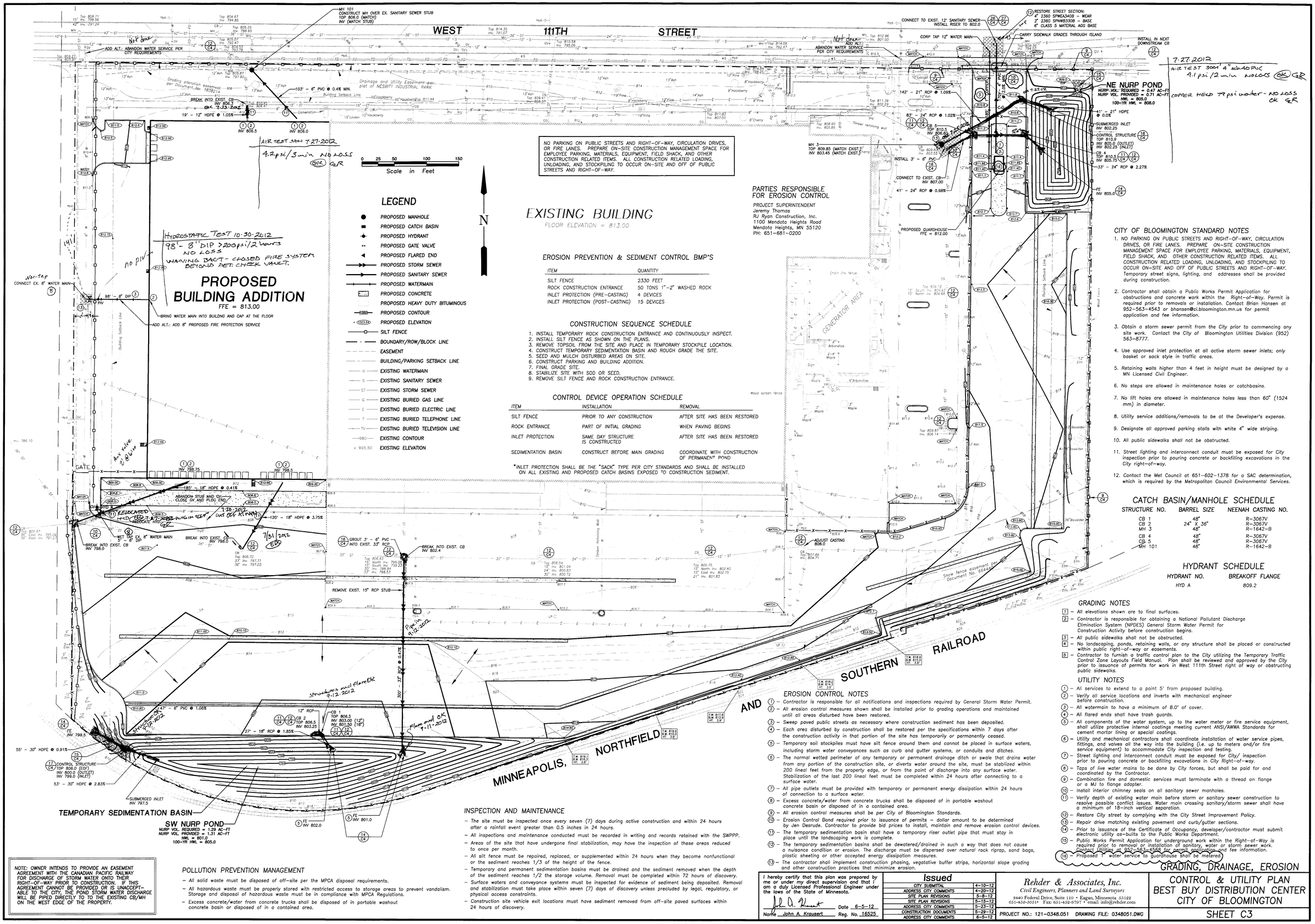
As-built drawing 12-11-12 - 6201 W 111th St - Best Buy Distribution Center



NAME OF PROJECT: BEST BUY DISTRIBUTION CENTER

PROJECT ENGINEER: REHDER AND ASSOCIATES, INC.
JOHN KRAUSERT, PE
3440 FEDERAL DRIVE, SUITE 110
EAGAN, MN 55122
PHONE: 651-452-5051

DATE INSTALLED: JULY 2012



PARTIES RESPONSIBLE FOR EROSION CONTROL

PROJECT SUPERINTENDENT
Jeremy Thomas
RJ Ryan Construction, Inc.
1100 Mendota Heights Road
Mendota Heights, MN 55120
PH: 651-681-0200

EROSION PREVENTION & SEDIMENT CONTROL BMP'S

ITEM	QUANTITY
SILT FENCE	2330 FEET
ROCK CONSTRUCTION ENTRANCE	50 TONS 1"-2" WASHED ROCK
INLET PROTECTION (PRE-CASTING)	4 DEVICES
INLET PROTECTION (POST-CASTING)	15 DEVICES

CONSTRUCTION SEQUENCE SCHEDULE

1. INSTALL TEMPORARY ROCK CONSTRUCTION ENTRANCE AND CONTINUOUSLY INSPECT.
2. INSTALL SILT FENCE AS SHOWN ON THE PLANS.
3. REMOVE TOPSOIL FROM THE SITE AND PLACE IN TEMPORARY STOCKPILE LOCATION.
4. CONSTRUCT TEMPORARY SEDIMENTATION BASIN AND ROUGH GRADE THE SITE.
5. SEED AND MULCH DISTURBED AREAS ON SITE.
6. CONSTRUCT PARKING AND BUILDING ADDITION.
7. FINAL GRADE SITE.
8. STABILIZE SITE WITH SOD OR SEED.
9. REMOVE SILT FENCE AND ROCK CONSTRUCTION ENTRANCE.

CONTROL DEVICE OPERATION SCHEDULE

ITEM	INSTALLATION	REMOVAL
SILT FENCE	PRIOR TO ANY CONSTRUCTION	AFTER SITE HAS BEEN RESTORED
ROCK ENTRANCE	PART OF INITIAL GRADING	WHEN PAVING BEGINS
INLET PROTECTION	SAME DAY STRUCTURE IS CONSTRUCTED	AFTER SITE HAS BEEN RESTORED
SEDIMENTATION BASIN	CONSTRUCT BEFORE MAIN GRADING	COORDINATE WITH CONSTRUCTION OF PERMANENT POND

*INLET PROTECTION SHALL BE THE "SACK" TYPE PER CITY STANDARDS AND SHALL BE INSTALLED ON ALL EXISTING AND PROPOSED CATCH BASINS EXPOSED TO CONSTRUCTION SEDIMENT.

CITY OF BLOOMINGTON STANDARD NOTES

1. NO PARKING ON PUBLIC STREETS AND RIGHT-OF-WAY, CIRCULATION DRIVES, OR FIRE LANES. PREPARE ON-SITE CONSTRUCTION MANAGEMENT SPACE FOR EMPLOYEE PARKING, MATERIALS, EQUIPMENT, FIELD SHACK, AND OTHER CONSTRUCTION RELATED ITEMS. ALL CONSTRUCTION RELATED LOADING, UNLOADING, AND STOCKPILING TO OCCUR ON-SITE AND OFF OF PUBLIC STREETS AND RIGHT-OF-WAY. Temporary street signs, lighting, and addresses shall be provided during construction.
2. Contractor shall obtain a Public Works Permit Application for obstructions and concrete work within the Right-of-Way. Permit is required prior to removals or installation. Contact Brian Hansen at 952-563-4543 or bhansen@ci.bloomington.mn.us for permit application and fee information.
3. Obtain a storm sewer permit from the City prior to commencing any site work. Contact the City of Bloomington Utilities Division (952) 563-8777.
4. Use approved inlet protection at all active storm sewer inlets; only basket or sack style in traffic areas.
5. Retaining walls higher than 4 feet in height must be designed by a MN Licensed Civil Engineer.
6. No steps are allowed in maintenance holes or catchbasins.
7. No lift holes are allowed in maintenance holes less than 60" (1524 mm) in diameter.
8. Utility service additions/removals to be at the Developer's expense.
9. Designate all approved parking stalls with white 4" wide striping.
10. All public sidewalks shall not be obstructed.
11. Street lighting and interconnect conduit must be exposed for City inspection prior to pouring concrete or backfilling excavations in the City right-of-way.
12. Contact the Met Council at 651-602-1378 for a SAC determination, which is required by the Metropolitan Council Environmental Services.

CATCH BASIN/MANHOLE SCHEDULE

STRUCTURE NO.	BARREL SIZE	NEENAH CASTING NO.
CB 1	48"	R-3067V
CB 2	24" X 36"	R-3067V
MH 3	48"	R-1642-B
CB 4	48"	R-3067V
CB 5	48"	R-3067V
MH 101	48"	R-1642-B

HYDRANT SCHEDULE

HYDRANT NO.	BREAKOFF FLANGE
HYD A	809.2

GRADING NOTES

1 – All elevations shown are to final surfaces.
2 – Contractor is responsible for obtaining a National Pollutant Discharge Elimination System (NPDES) General Storm Water Permit for Construction Activity before construction begins.
3 – All public sidewalks shall not be obstructed.
4 – No landscaping, ponds, retaining walls, or any structure shall be placed or constructed within public right-of-way or easements.
5 – Contractor to furnish a traffic control plan to the City utilizing the Temporary Traffic Control Zone Layouts Field Manual. Plan shall be reviewed and approved by the City prior to issuance of permits for work in West 111th Street right of way or obstructing public sidewalks.

UTILITY NOTES

1 – All services to extend to a point 5' from proposed building.
2 – Verify all service locations and inverts with mechanical engineer before construction.
3 – All watermain to have a minimum of 8.0' of cover.
4 – All flared ends shall have trash guards.
5 – All components of the water system, up to the water meter or fire service equipment, shall utilize protective internal coatings meeting current ANSI/AWWA Standards for cement mortar lining or special coatings.
6 – Utility and mechanical contractors shall coordinate installation of water service pipes, fittings, and valves all the way into the building (i.e. up to meters and/or fire service equipment) to accommodate City inspection and testing.
7 – Street lighting and interconnect conduit must be exposed for City/ inspection prior to pouring concrete or backfilling excavations in City Right-of-way.
8 – Taps of live water mains to be done by City forces, but shall be paid for and coordinated by the Contractor.
9 – Combination fire and domestic services must terminate with a thread on flange or a MJ to flange adapter.
10 – Install interior chimney seals on all sanitary sewer manholes.
11 – Verify depth of existing water main before storm or sanitary sewer construction to resolve possible conflict issues. Water main crossing sanitary/storm sewer shall have a minimum of 18-inch vertical separation.
12 – Restore City street by complying with the City Street Improvement Policy.
13 – Repair drive matching existing pavement and curb/gutter sections.
14 – Prior to issuance of the Certificate of Occupancy, developer/contractor must submit electronic utility as-builts to the Public Works Department.
15 – Public Works Permit Application for underground work within the Right-of-Way is required prior to removal or installation of sanitary, water or storm sewer work. Contact Utilities at 952-563-8958 for permit application and fee information.
16 – Proposed 1" water service to guardhouse shall be metered.

EROSION CONTROL NOTES

1 – Contractor is responsible for all notifications and inspections required by General Storm Water Permit.
2 – All erosion control measures shown shall be installed prior to grading operations and maintained until all areas disturbed have been restored.
3 – Sweep paved public streets as necessary where construction sediment has been deposited.
4 – Each area disturbed by construction shall be restored per the specifications within 7 days after the construction activity in that portion of the site has temporarily or permanently ceased.
5 – Temporary soil stockpiles must have silt fence around them and cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduits and ditches.
6 – The normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water.
7 – All pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours of connection to a surface water.
8 – Excess concrete/water from concrete trucks shall be disposed of in portable washout concrete basin or disposed of in a contained area.
9 – All erosion control measures shall be per City of Bloomington Standards.
10 – Erosion Control Bond required prior to issuance of permits – dollar amount to be determined by Jen Desrude. Contractor to provide bid prices to install, maintain and remove erosion control devices.
11 – The temporary sedimentation basin shall have a temporary riser outlet pipe that must stay in place until the landscaping work is complete.
12 – The temporary sedimentation basins shall be dewatered/drained in such a way that does not cause a nuisance condition or erosion. The discharge must be dispersed over natural rock riprap, sand bags, plastic sheeting or other accepted energy dissipation measures.
13 – The contractor shall implement construction phasing, vegatative buffer strips, horizontal slope grading and other construction practices that minimize erosion.

INSPECTION AND MAINTENANCE

- The site must be inspected once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours.
- All inspections and maintenance conducted must be recorded in writing and records retained with the SWPPP.
- Areas of the site that have undergone final stabilization, may have the inspection of these areas reduced to once per month.
- All silt fence must be repaired, replaced, or supplemented within 24 hours when they become nonfunctional or the sediment reaches 1/3 of the height of the fence.
- Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of the sediment reaches 1/2 the storage volume. Removal must be completed within 72 hours of discovery.
- Surface waters and conveyance systems must be inspected for evidence of sediment being deposited. Removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints.
- Construction site vehicle exit locations must have sediment removed from off-site paved surfaces within 24 hours of discovery.

POLLUTION PREVENTION MANAGEMENT

- All solid waste must be disposed of off-site per the MPCA disposal requirements.
- All hazardous waste must be properly stored with restricted access to storage areas to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA Regulations.
- Excess concrete/water from concrete trucks shall be disposed of in portable washout concrete basin or disposed of in a contained area.

NOTE: OWNER INTENDS TO PROVIDE AN EASEMENT AGREEMENT WITH THE CANADIAN PACIFIC RAILWAY FOR DISCHARGE OF STORM WATER ONTO THEIR RIGHT-OF-WAY PRIOR TO CONSTRUCTION. IF THIS AGREEMENT CANNOT BE PROVIDED OR IS UNACCEPTABLE TO THE CITY, THE POND STORM WATER DISCHARGE WILL BE PIPED DIRECTLY TO TO THE EXISTING CB/MH ON THE WEST EDGE OF THE PROPERTY.

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Name John A. Krausert Date 6-5-12 Reg. No. 16525

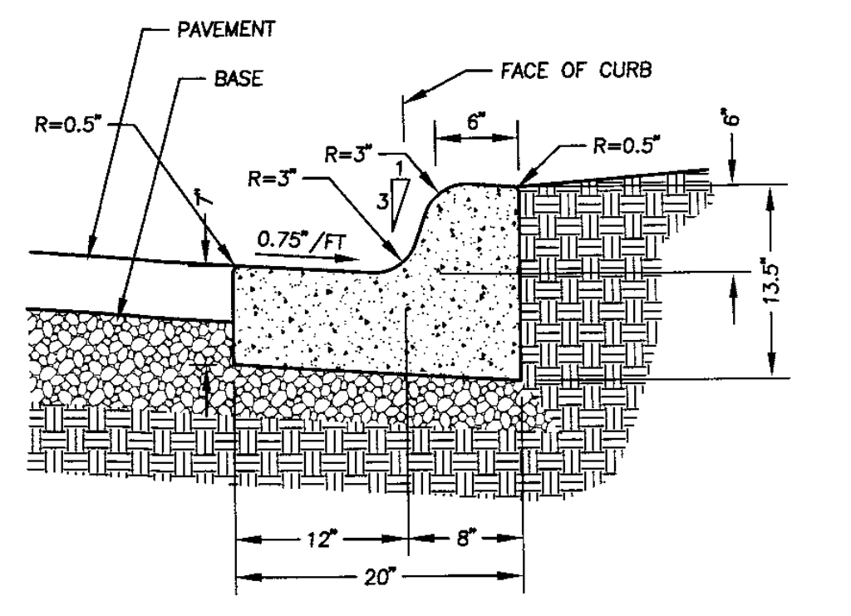
Issued	
CITY SUBMITTAL	4-10-12
ADDRESS CITY COMMENTS	4-20-12
SITE PLAN REVISIONS	5-8-12
SITE PLAN REVISIONS	5-15-12
ADDRESS CITY COMMENTS	5-23-12
CONSTRUCTION DOCUMENTS	5-29-12
ADDRESS CITY COMMENTS	6-5-12

Rehder & Associates, Inc.
Civil Engineers, Planners and Land Surveyors
3440 Federal Drive, Suite 110 • Eagan, Minnesota 55122
651-452-5051• Fax: 651-452-9797 • email: info@rehder.com

PROJECT NO.: 121-0348.051 DRAWING FILE: 0348051.DWG

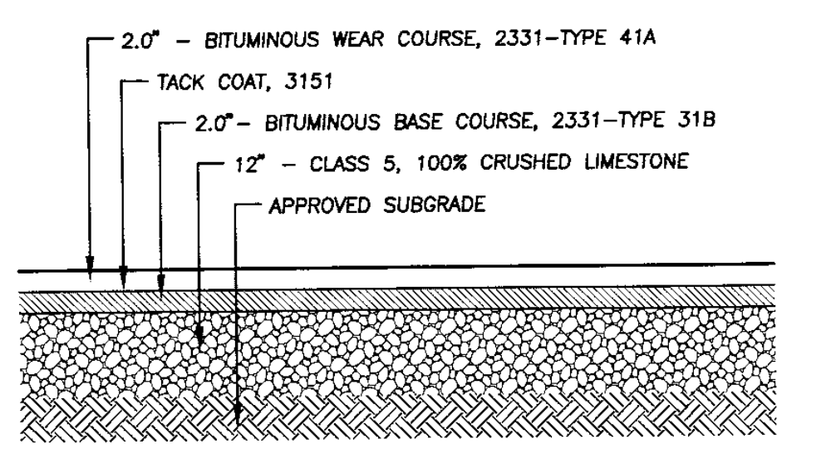
GRADING, DRAINAGE, EROSION
CONTROL & UTILITY PLAN
BEST BUY DISTRIBUTION CENTER
CITY OF BLOOMINGTON
SHEET C3

PUBLIC WORKS ENGINEERING DIVISION
Approved Kristie Oswald
Not Approved
Date 6/11/12



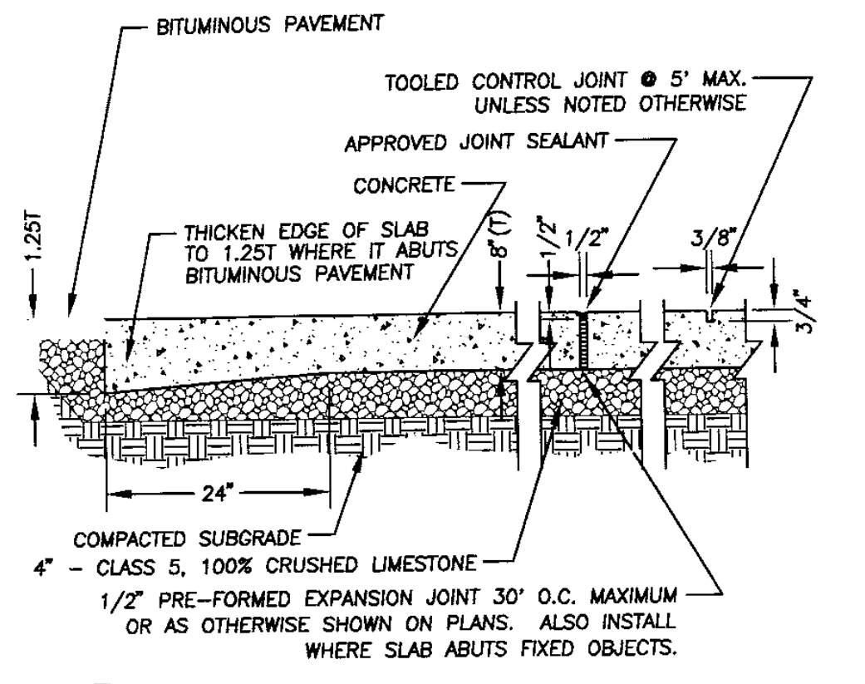
Note: Where contours indicate, ignore 0.75"/ft slope indicated above and match adjoining pavement slope to prevent gutter from "ponding".

1 / C4 B612 CONCRETE CURB & GUTTER
NO SCALE

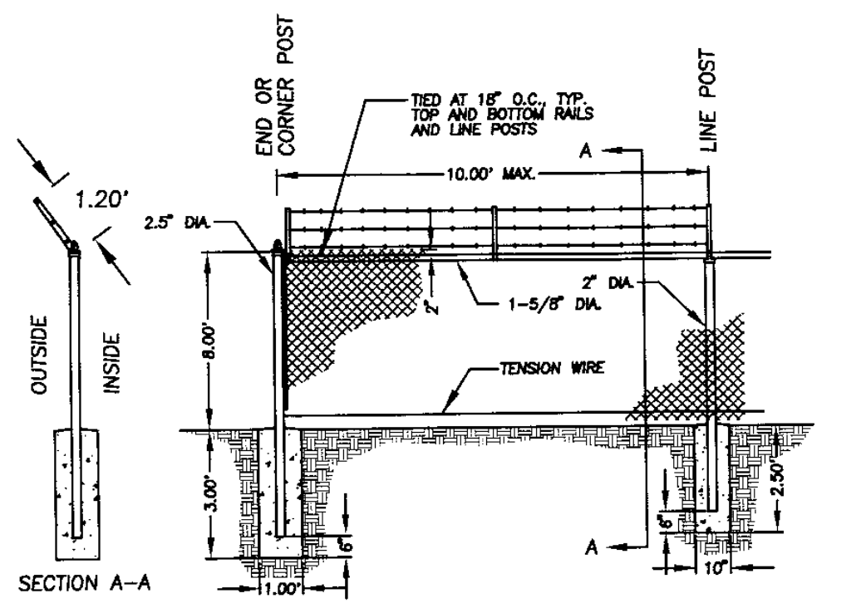


NOTE: VERIFY ADEQUACY OF PAVEMENT SECTION WITH ENGINEER AFTER SUBGRADE SOILS ARE EXPOSED AND BEFORE BITUMINOUS PAVEMENT IS PLACED.

2 / C4 HEAVY DUTY PAVEMENT SECTION
NO SCALE

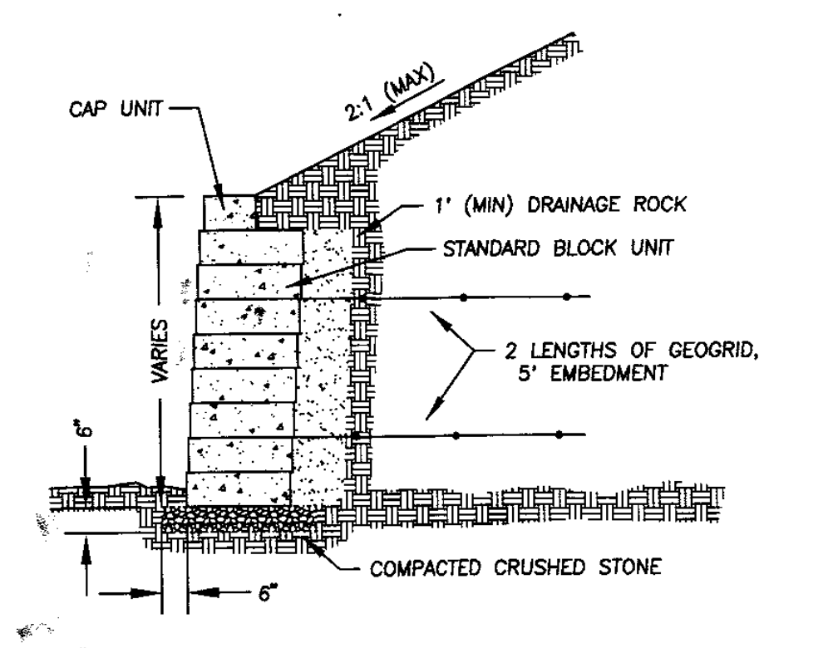


3 / C4 CONCRETE SLAB/DOLLY PAD SECTION
NO SCALE

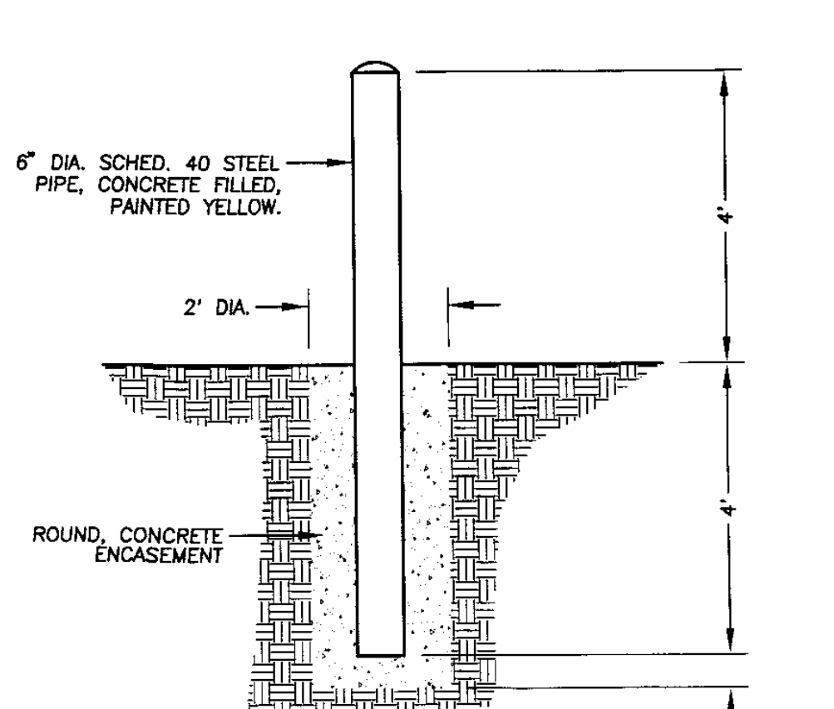


Fabric shall be 9 gauge, aluminum coated steel, 2" mesh with knuckled selvage top and bottom.
Note: Install salvaged fencing to the extent possible.

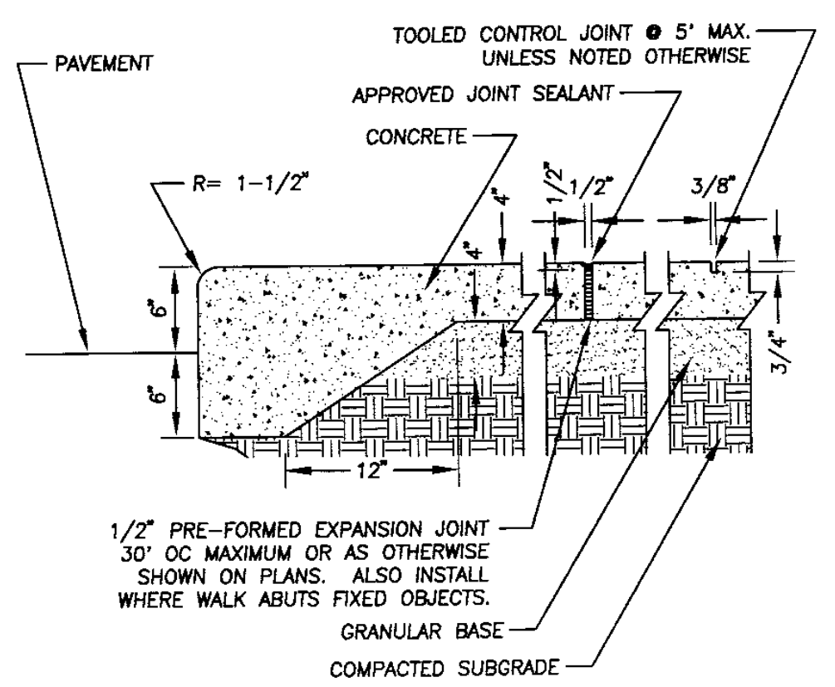
4 / C4 8' CHAIN LINK FENCE
NO SCALE



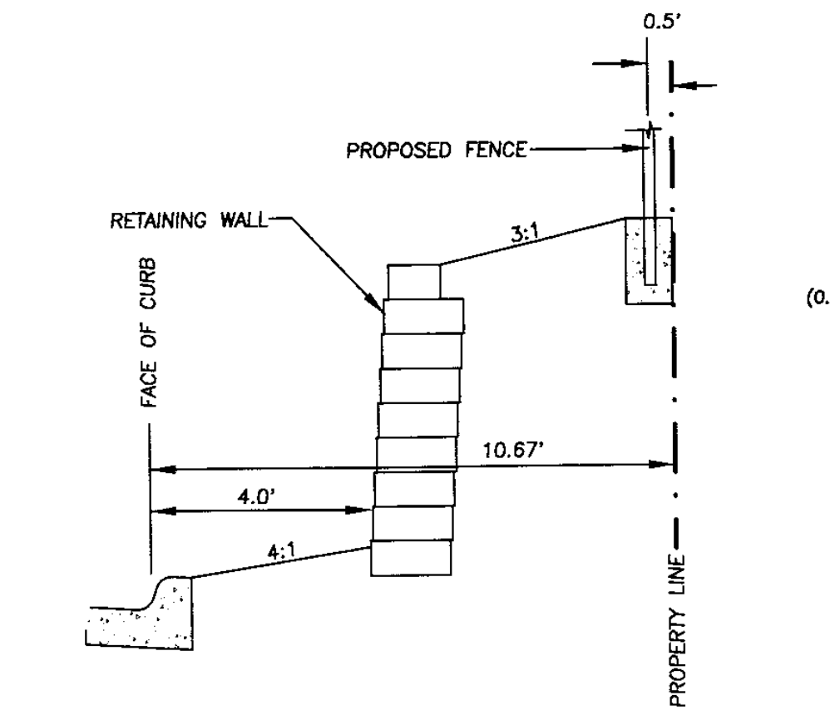
5 / C4 MODULAR BLOCK RETAINING WALL
NO SCALE



6 / C4 BOLLARD
NO SCALE

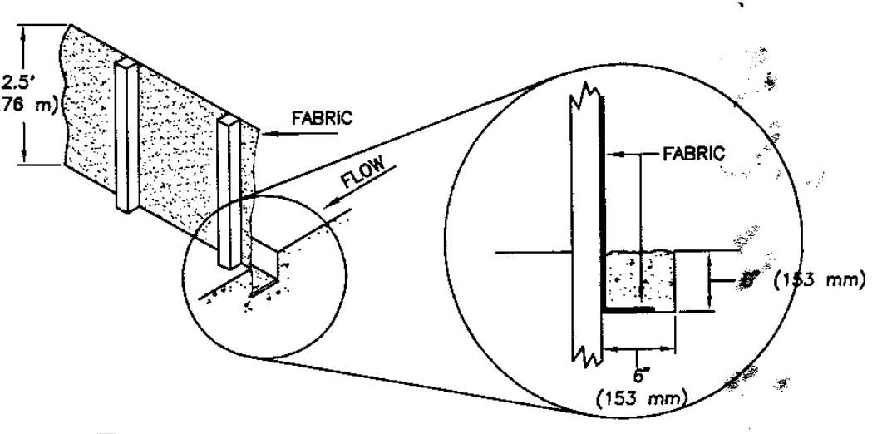


7 / C4 SIDEWALK/INTEGRAL CURB
NO SCALE

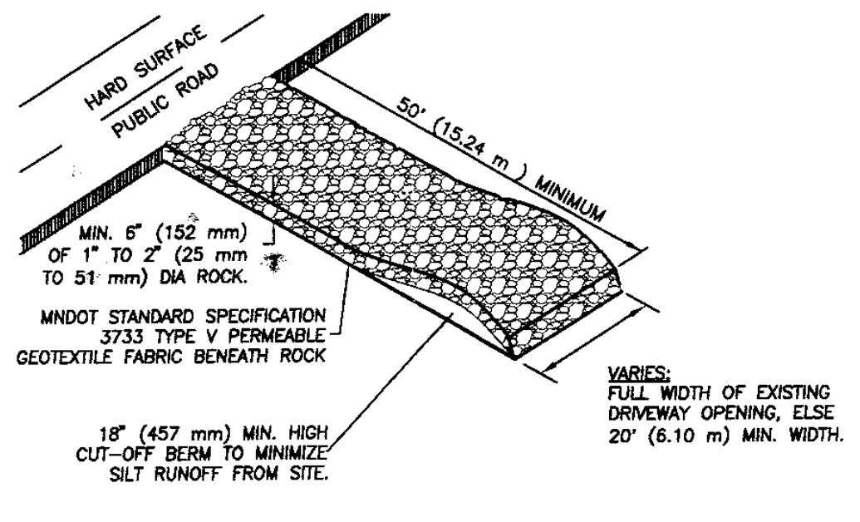


8 / C4 SECTION AT WALL
NO SCALE

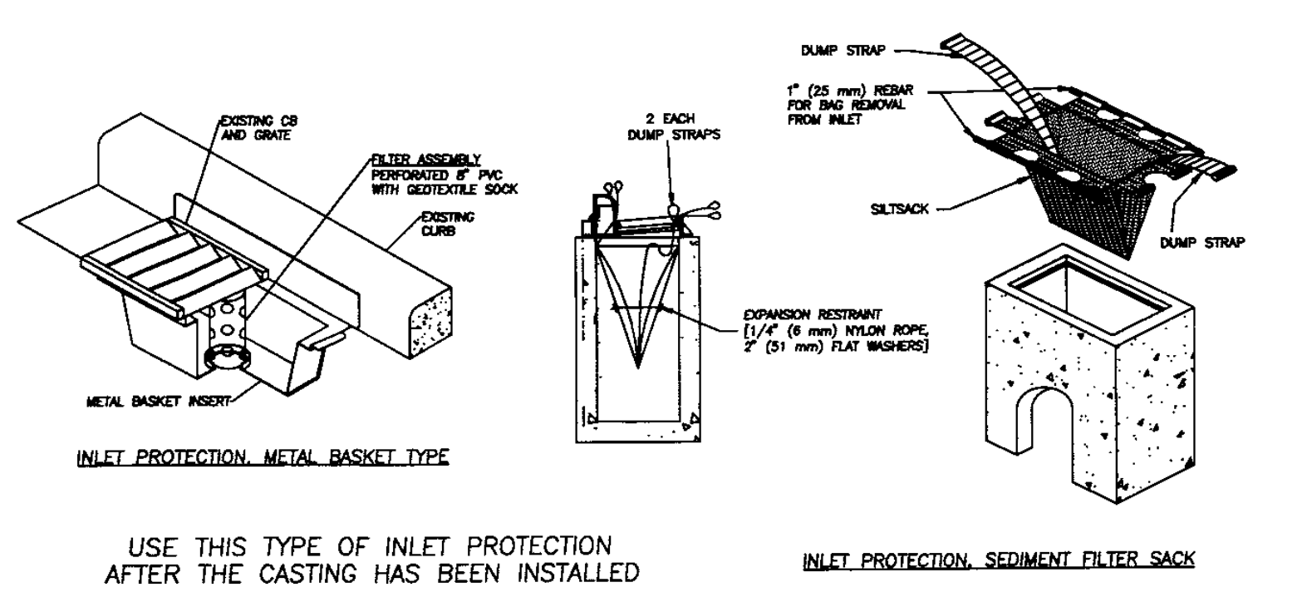
NOTES:
- PLACE BOTTOM EDGE OF FENCE INTO 6" (153 mm) DEEP TRENCH AND BACKFILLED IMMEDIATELY. POSTS SHALL BE:
- 4' (1.22 m) ON CENTER
- 2" X 2" HARDWOOD, PINE OR STANDARD STEEL FENCE POSTS
- DRIVEN 2' (0.61 m) INTO THE GROUND.



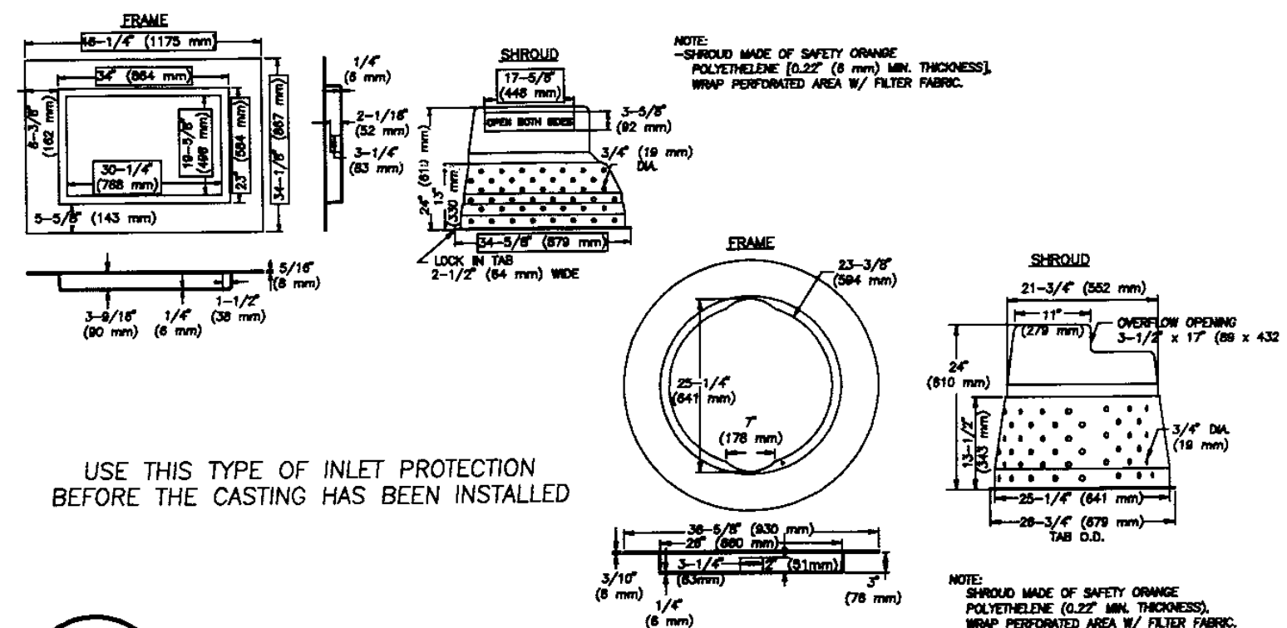
9 / C4 SILT FENCE
NO SCALE



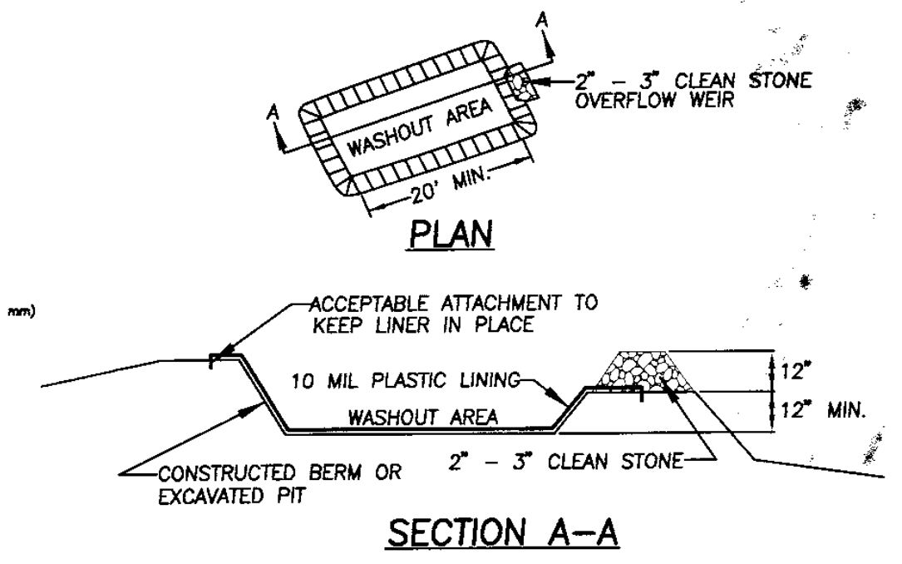
10 / C4 ROCK CONSTRUCTION ENTRANCE
NO SCALE



11 / C4 INLET PROTECTION
NO SCALE



12 / C4 INLET PROTECTION
NO SCALE



NOTES:

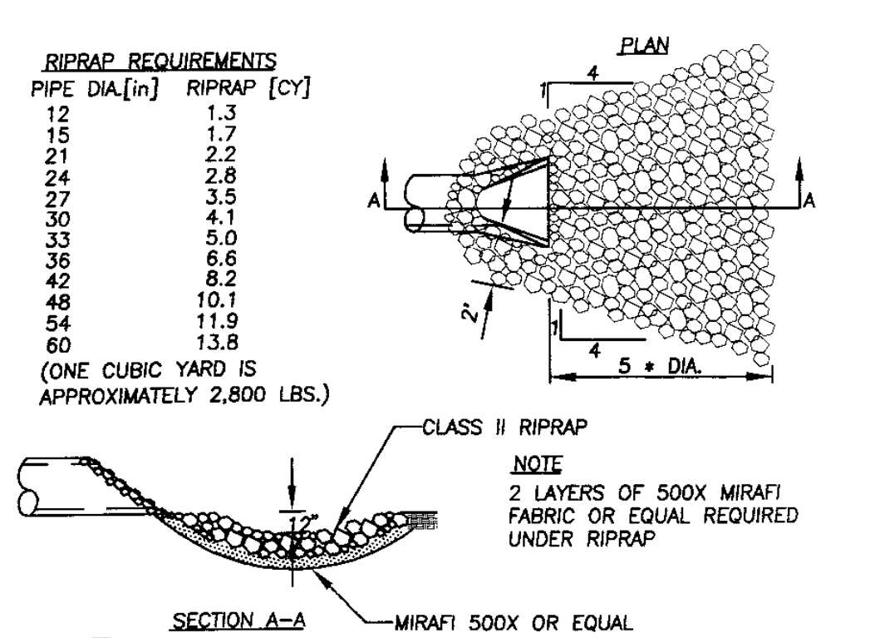
1) PLACEMENT OF WASHOUT AREA SHALL BE AT THE DISCRETION OF THE CONTRACTOR BUT SHALL BE AT LEAST THE MINIMUM DISTANCE FROM THE RIGHT OF WAY AS REQUIRED BY LOCAL JURISDICTION AND SHALL BE LOCATED IN SUCH A MANNER SO THAT THE CONCRETE TRUCKS MAY PASS THROUGH THE WASHOUT AREA PRIOR TO THE ROCK CONSTRUCTION EXIT.

2) HARDENED MATERIAL SHALL BE BROKEN UP AND CLEANED OUT AS NEEDED TO MAINTAIN A FUNCTIONING WASHOUT AREA VOLUME OR AS DIRECTED BY THE ENGINEER.

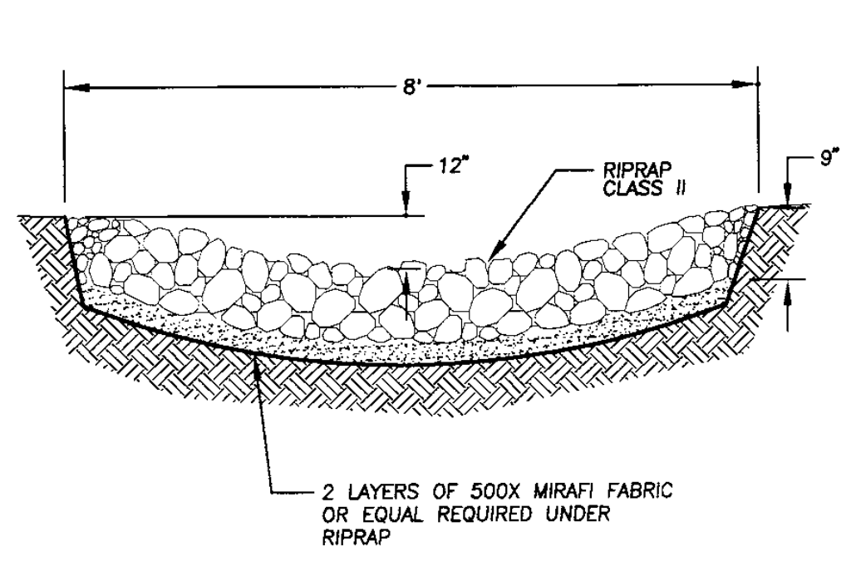
3) WASHOUT AREA MUST BE GREATER THAN 50 FEET FROM ANY TREES.

4) AN APPROVED PORTABLE CONCRETE WASHOUT BASIN MAY BE USED IN LIEU OF DETAIL.

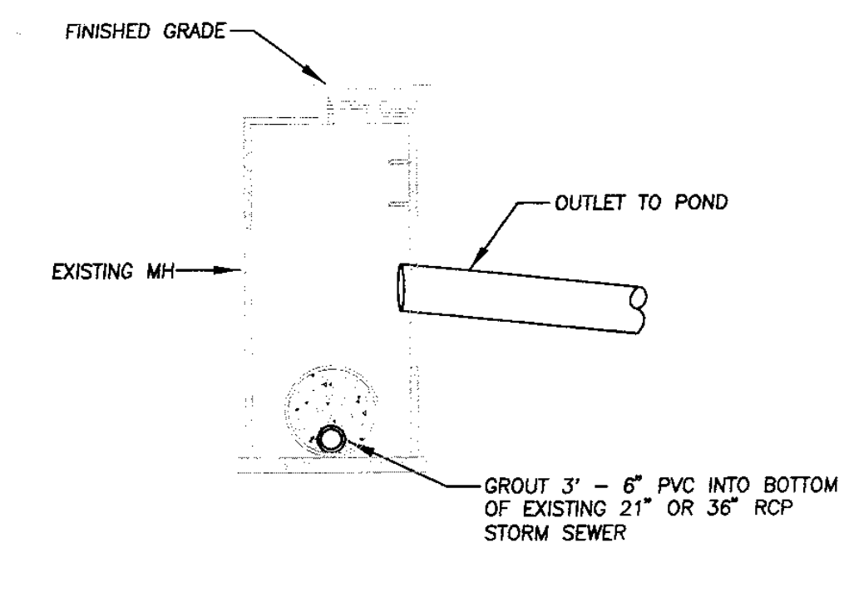
13 / C4 CONCRETE WASHOUT AREA
NO SCALE



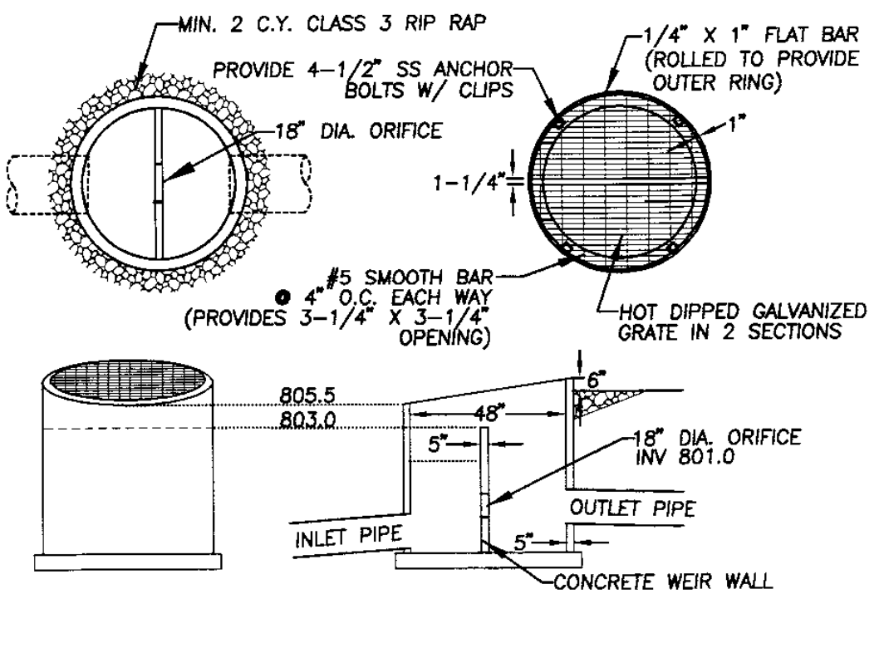
14 / C4 RIPRAP DETAIL
NO SCALE



15 / C4 POND OVERFLOW
NO SCALE



16 / C4 MODIFIED SUMP MANHOLE
NO SCALE



17 / C4 CONTROL STRCUTURE (SW POND)
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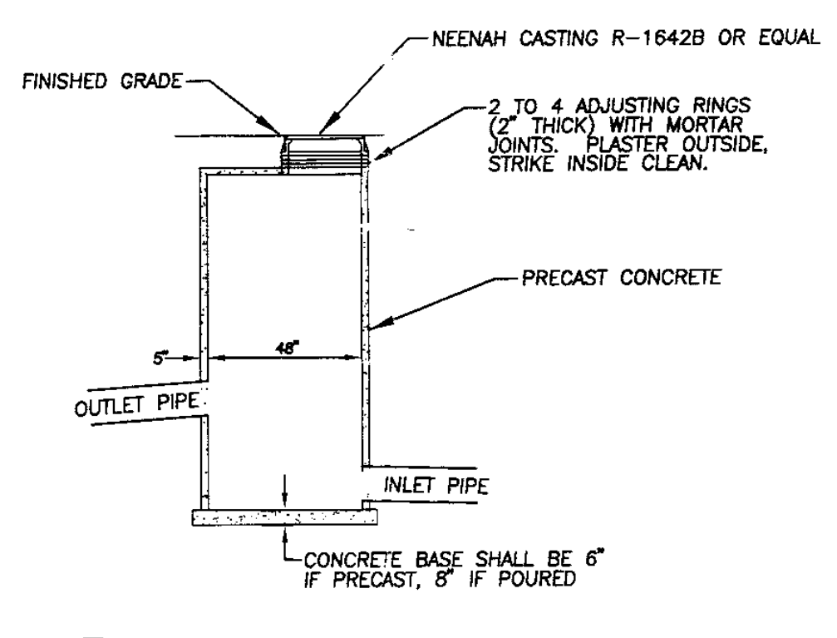

18 / C4 CONTROL STRUCTURE (NE POND)
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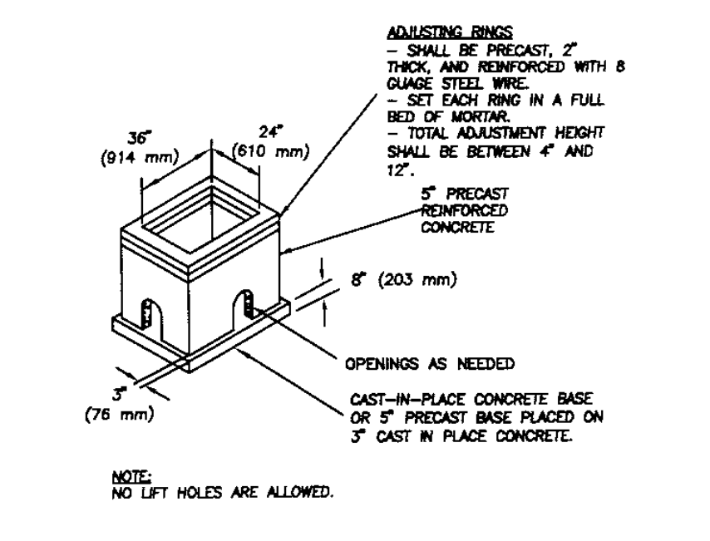

19 / C4 STANDARD CATCH BASIN
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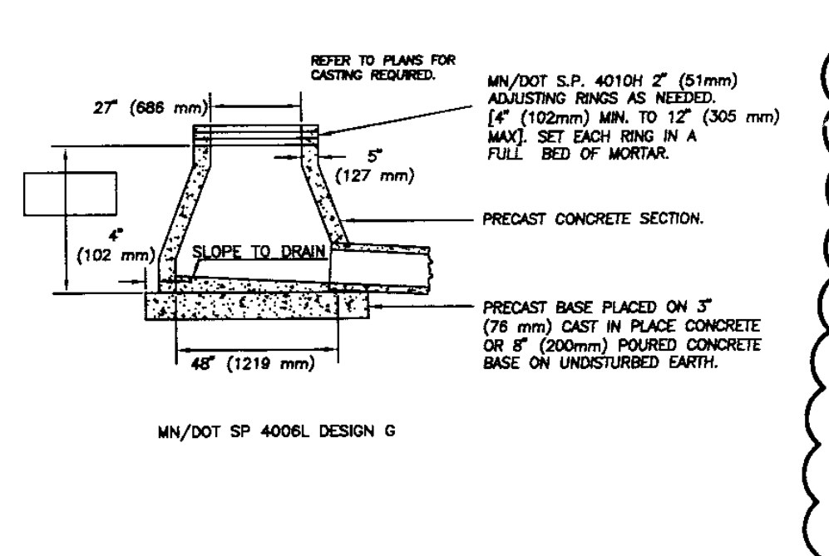
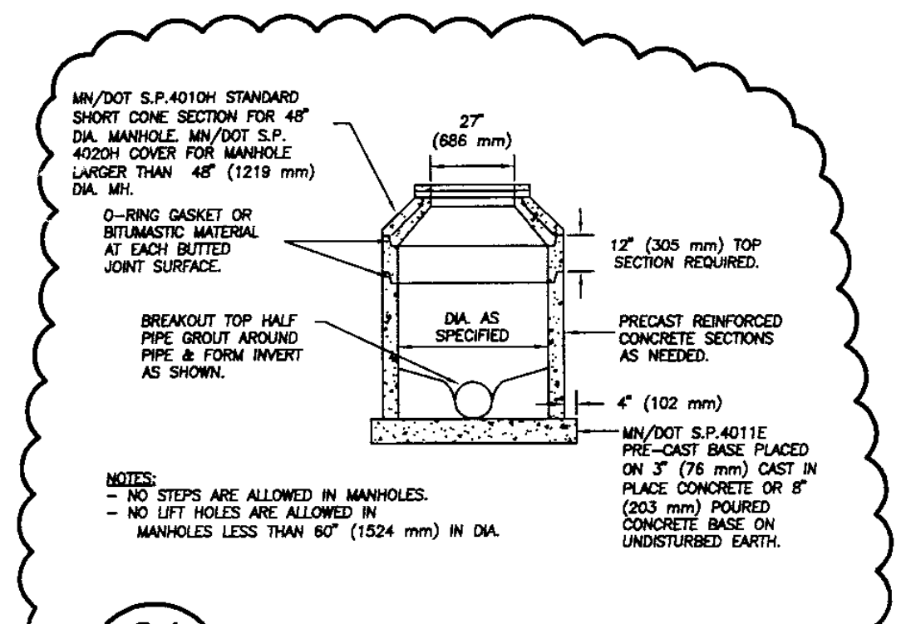


20 / C4 DESIGN "G" CATCH BASIN
NO SCALE



21 / C4 STANDARD MANHOLE
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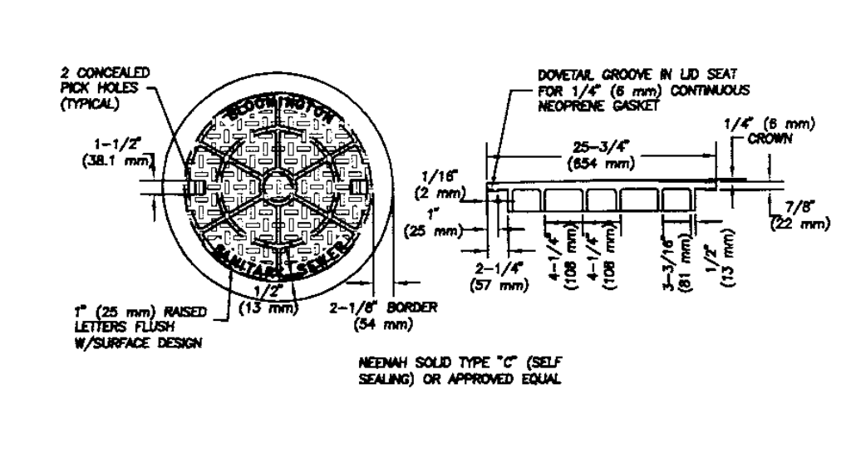
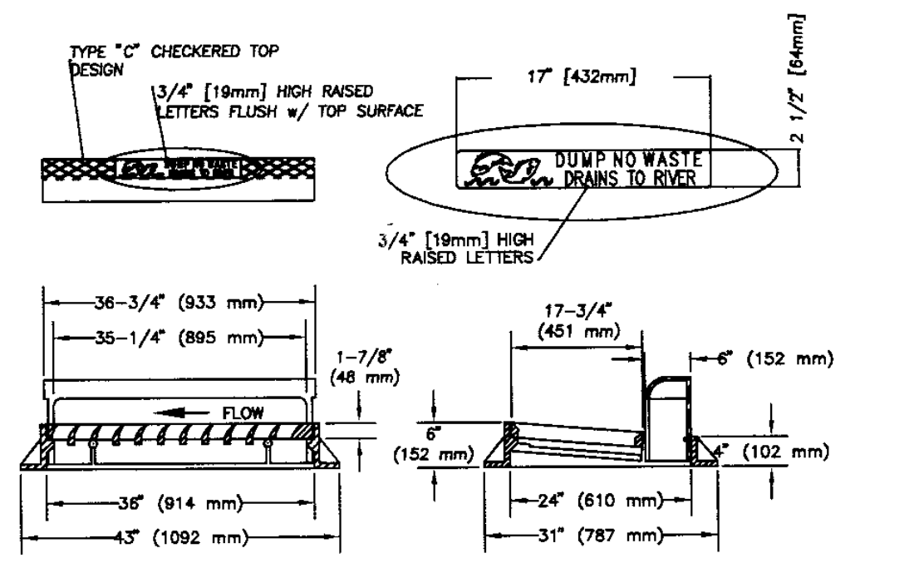
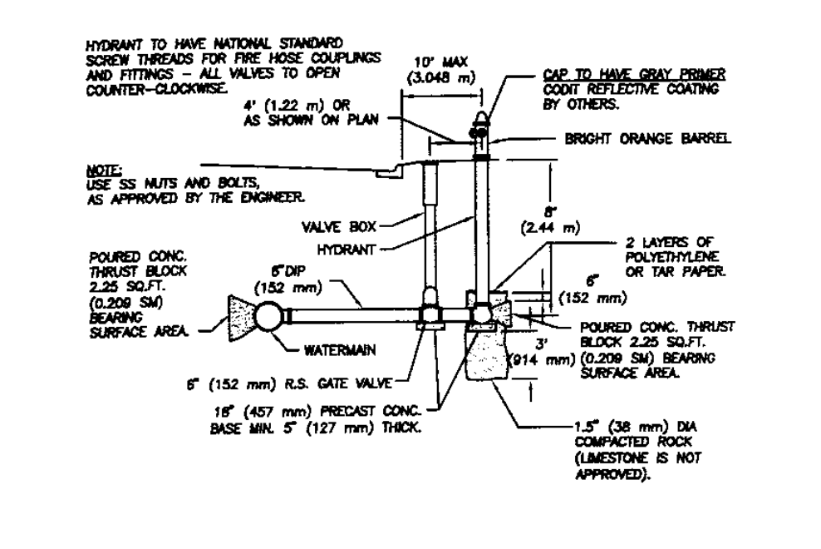


22 / C4 STANDARD MANHOLE COVER
NO SCALE

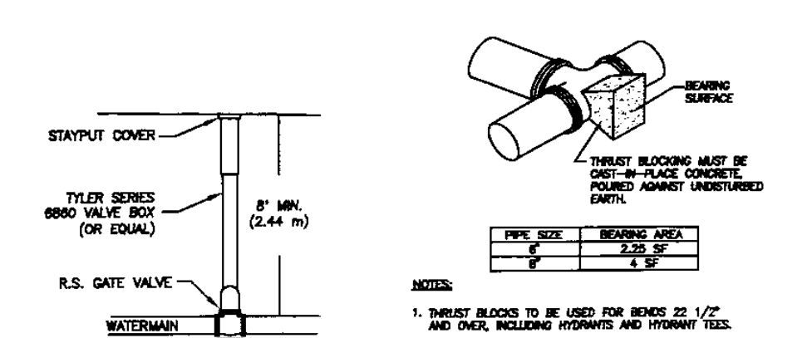


USE NEENAH R-3037 WITH TYPE V GRATE OR APPROVED EQUAL

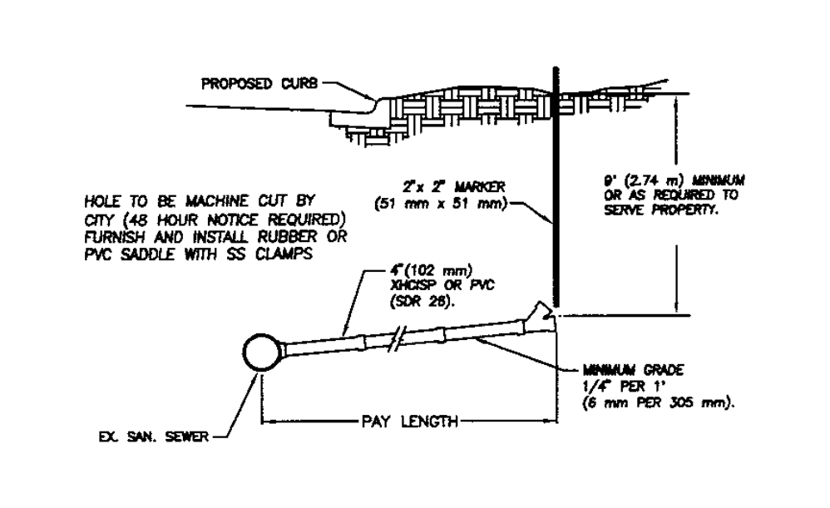
23 / C4 STANDARD RECTANGULAR CASTING
NO SCALE



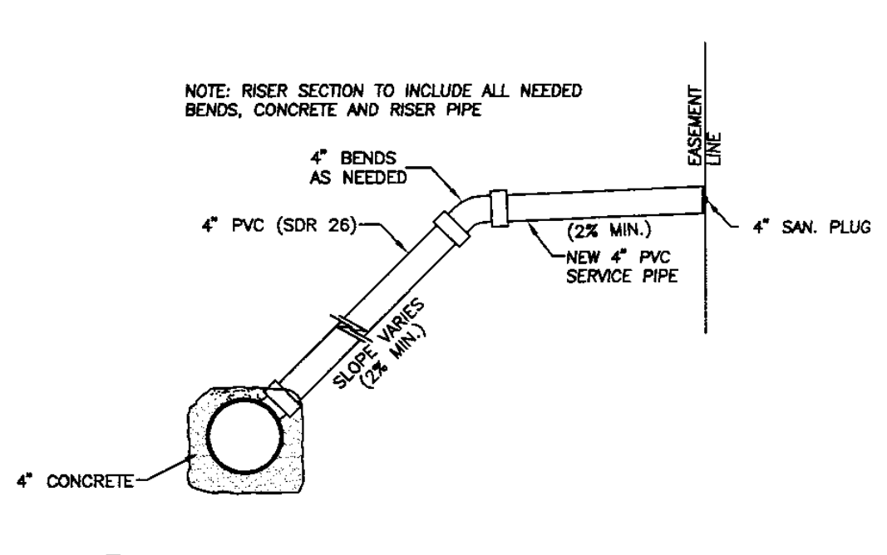
24 / C4 TYPICAL HYDRANT INSTALLATION
NO SCALE



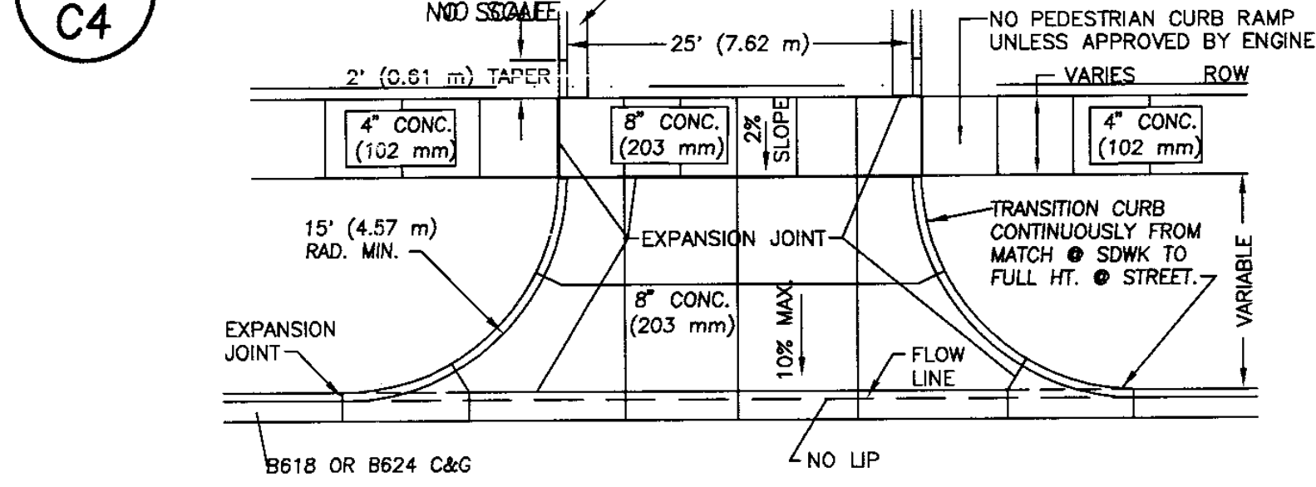
25 / C4 TYPICAL VALVE INSTALLATION AND THRUST BLOCK
NO SCALE



26 / C4 STANDARD CONNECTION FOR CUT-IN SANITARY SERVICE
NO SCALE

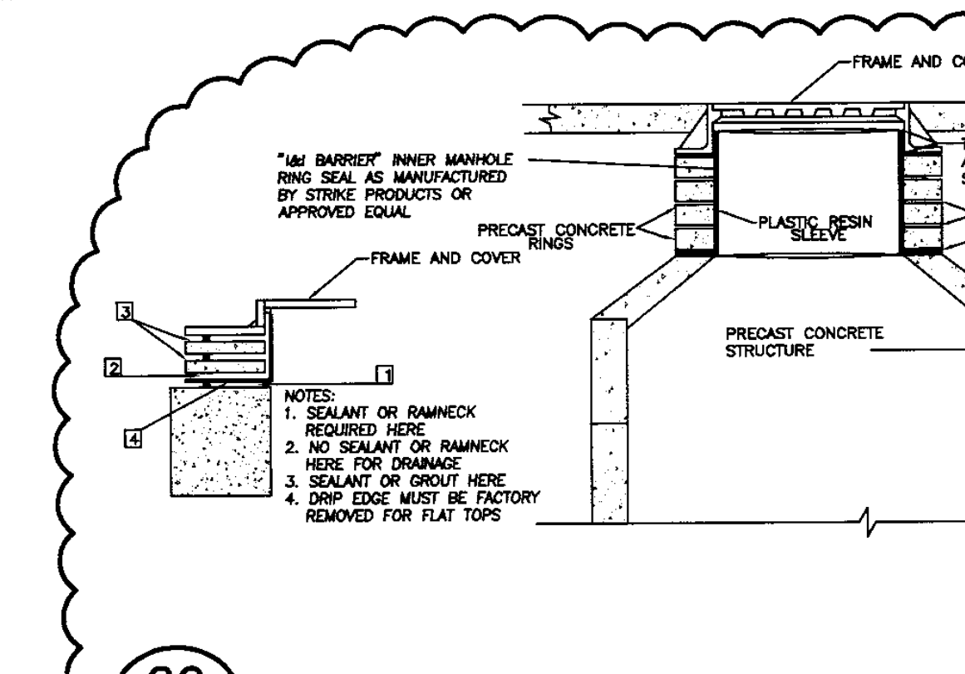


27 / C4 RISER DETAIL
NO SCALE



NOTE:
- EACH DRIVEWAY PANEL NOT TO EXCEED 100 SF (9.29 m2).
- REINFORCEMENT BARS OR WELDED WIRE FABRIC (STEEL MESH) ARE NOT ALLOWED IN THE RIGHT-OF-WAY
- CLASS 5 AGGREGATE BASE REQUIRED UNDER CURB AND GUTTER.
- IF PRESENT, STREET LIGHT, SIGNAL AND INTERCONNECT CONDUIT OR DIRECT BURIED STREET LIGHT WIRING MUST BE EXPOSED FOR INSPECTION PRIOR TO POUR

28 / C4 NON-RESIDENTIAL DRIVEWAY APPROACH WITH BOULEVARD SIDEWALK
NO SCALE



29 / C4 INTERNAL CHIMNEY SEAL
NO SCALE

SPECIFICATIONS

GENERAL

I. GENERAL

A. Before construction begins, the Contractor will contact all utility companies, both public and private and have them locate all utilities within the construction limits.
B. The Contractor shall be responsible for arranging all required inspections with the governing authority that has jurisdiction over the work that is to be performed.
C. The Contractor shall stay within the construction limits unless approved otherwise by the Owner and or Engineer. Construction limits are defined by the property boundary unless shown different on the plan.
D. The Contractor shall be responsible for protecting all existing structures, utilities, trees, etc. from damage during construction.
E. The Contractor shall be responsible for correcting any damage (at Contractor's expense).
F. Any discrepancies found on the site that affect the proposed work shall be reported to the Owner and/or Engineer before the completion of any additional work.
G. Soils report and pavement recommendation provided by AET, Inc. Report No. 22-01343.
H. Existing Topography and Boundary Survey provided by Rehder & Associates, Inc.

SITE CLEARING

I. GENERAL

A. Remove trees, shrubs, grass, and other vegetation or obstructions, as required, to permit installation of improvements shown on the Plans.

II. EXECUTION

A. Trees and stumps shall be hauled from the site. Burial on-site or burning of trees and stumps will not be allowed.
B. Where existing trees are indicated to remain, leave existing topsoil in place within drip lines to prevent damage to root system.
C. Topsoil shall be stripped from disturbed areas and stockpiled in piles not exceeding 8-feet in depth.
D. Remove all back dirt and unsuitable material from under drives and roadways within 3-feet of final pavement subgrade.
E. Remove all waste materials and unsuitable or excess topsoil from Owner's property.

GRADING, EROSION CONTROL, AND TURF ESTABLISHMENT

I. GENERAL

A. All grading, erosion control and turf establishment shall be according to the materials, workmanship, and other applicable requirements of the Minnesota Department of Transportation "Standard Specifications for Construction", latest edition, unless otherwise specified.
B. All erosion control measures shown on the plans must be installed prior to commencement of grading operations and maintained until all areas altered on the site have been restored.
C. All areas disturbed by construction shall be restored with seed and disked mulch, sod, wood fiber blanket, or be hard surfaced within two weeks of substantial completion of construction.
D. Provide approved borrow soil materials from off-site when sufficient approved soil materials are not available from excavations. Remove all excess and unsatisfactory material from the site.
E. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
F. Compaction shall not be less than the following percentages of maximum dry density according to ASTM D 698:
  i. Under structures, building slabs, steps, and pavements, compact the top 12 inches below subgrade and each layer of backfill or fill material at 100 percent maximum dry density.
  ii. Under walkways, compact the top 6 inches below subgrade and each layer of backfill or fill material at 100 percent maximum dry density.
  iii. Under lawn or unpaved areas, compact the top 6 inches below subgrade and each layer of backfill or fill material at 95 percent maximum dry density.
G. Grades as shown on the plan are to finished grade.

II. PRODUCTS

A. Satisfactory soils include ASTM D 2487 soil classification groups GW, GP, GM, SW, SP, and SM; free of rock or gravel larger than 2-inches in any dimension, debris waste, frozen materials, vegetation and other deleterious matter.
B. Unsatisfactory soils include ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT.
C. All backfill and fill materials must be satisfactory soil materials.
D. Topsoil shall be per ASTM D 5268, free of stones 1" or larger.
E. Subbase and base material must be a naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand meeting MNDOT Specifications for Class 5 gravel.
F. Spring/Summer temporary turf establishment: seed shall be MNDOT Mixture 110 @ 100 lbs/acre and mulch shall be MNDOT Type 1.
G. Winter temporary turf establishment: seed shall be MNDOT Mixture 100 @ 100 lbs/acre and mulch shall be MNDOT Type 1.
H. Pond turf establishment: seed shall be MNDOT Mixture 310 @ 82 lbs/acre, fertilizer shall be 0-10-20 (NPK) slow release, and mulch shall be MNDOT Type 3.
I. Provide fresh, clean, strongly rooted sod not less than 2 years old with a uniform thickness of not less than 2 inches and free of weeds (verify with landscape plan).

III. EXECUTION

A. Fill under buildings shall be compacted to meet Soil Engineer's recommendations.
B. Place 4-inches of topsoil over all areas to be re-established with turf.
C. Provide erosion control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
D. Place inlet protection devices in catch basins after they are constructed and maintain until all areas disturbed have been restored.
E. Wherever construction vehicle access routes intersect paved public roads, provisions must be made to minimize the transport of sediment (mud) by runoff or vehicles tracking onto the paved road surface. Where sediment is transported onto a public road surface, the roads shall be cleaned thoroughly at the end of each day. Sediment shall be removed by shoveling or sweeping and be transported to a sediment controlled disposal area. Street washing shall be allowed only after sediment is removed in this manner.

BITUMINOUS PAVEMENT

I. GENERAL

A. Provide hot-mix asphalt pavement according to the materials, workmanship, and other applicable requirements of the Minnesota Department of Transportation "Standard Specifications for Construction", latest edition, unless otherwise specified
B. Conform to applicable standards of authorities having jurisdiction for asphalt paving work on public property.

II. PRODUCTS

A. Use coarse and fine aggregate materials and gradations that have performed satisfactorily in previous installations.
B. Provide a base and wear course as indicated on the plan unless otherwise specified.
C. Provide a tack coat as indicated on the plan unless otherwise specified.

III. EXECUTION

A. Verify that the subgrade is dry and in suitable condition to support paving and imposed loads.
B. The Contractor shall furnish a tandem truck loaded with a minimum of 14-tons to check the completed subgrade and/or aggregate base for soft spots prior to placement.
C. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness, when compacted.
D. Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement.
E. Provide an average density of 96 percent of reference laboratory density according to ASTM D 1559, but not less than 94 percent nor greater than 100 percent
F. Tolerances: Base course thickness shall be plus or minus 0.5-inches and surface course shall be plus or minus 0.25-inches.

PORTLAND CEMENT CONCRETE PAVEMENT

I. GENERAL

A. Provide Portland cement concrete pavement for roads, curbs, walks and exterior slabs according to the materials, workmanship, and other applicable requirements of the Minnesota Department of Transportation "Standard Specifications for Construction", latest edition, unless otherwise specified.

II. PRODUCTS

A. Portland cement concrete for curb and gutter and sidewalk shall be 4000 psi, 28-day compressive strength, 5.0% air entrainment, and 3-inch slump.
B. Provide Grade-60 reinforcing bars and tie bars where indicated.
C. Curing compound shall be solvent-borne, liquid membrane-forming ASTM C309, Type I or approved equal.

III. EXECUTION

A. The Contractor shall furnish a tandem truck loaded with a minimum of 14-tons to check the completed subgrade and/or aggregate base for soft spots prior to pavement placement.
B. Comply with requirements and with ACI 304R for measuring, mixing, transporting, and placing concrete.
C. Comply with the Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars" for placing and supporting reinforcement.
D. Preformed expansion joints using 0.5-inch thickness shall be placed at each end of curb radius, at intersections, and approximately every 200-feet.
E. Contraction joints shall be placed at minimum 10-foot intervals in the curb and gutter and at 5-foot for walks.
F. Provide a medium to fine broom finish perpendicular to traffic flow.
G. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures using moisture curing, moisture-retaining-cover curing, curing compound or a combination of these.

STORM SEWER

I. GENERAL

A. Storm sewer shall comply with all local regulations pertaining to storm sewer systems including materials, installation, and testing. If no regulations exist, comply with "Standard Utilities Specifications" by the City Engineers Association of Minnesota, latest edition.

II. PRODUCTS

A. Storm sewer pipe indicated on the plan as RCP shall be reinforced concrete pipe, ASTM C 76, R-4, Wall B, for gasket joints with the following classes: 12"-18" Class 5, 21"- Class 4, 24"-33" Class 3, 36" and larger, Class 2.
B. Storm sewer indicated on the plan as HDPE shall be dual wall corrugated polyethylene pipe with soil tight fittings per the Corrugated Polyethylene Pipe Association (CPPA) standard specification 100-97.
C. Storm sewer catch basins and manholes shall be precast structures with at least two and at the most five adjusting rings.
D. Storm sewer castings indicated on the plan shall be from the Neenah Foundry or approved equal.
E. All flared end sections shall have standard duty trashguards.
F. Filter Fabric shall be Mirafi 700X or approved equal.
G. Riprap shall be random and Class II hand placed to a depth of one foot.

III. EXECUTION

A. The plans indicate the general location and arrangement of underground storm sewer systems. Location and arrangement of piping take into account many design considerations. Install piping as indicated on the plans, to the extent practical.
B. Flared ends and the last two sections of storm sewer pipe shall be tied with bolts.
C. Contractor should verify locations of utility connections at the building the architectural and mechanical plans.
D. HDPE sewer pipe shall be bedded in accordance with ASTM D 2321, "Recommended Practice for Underground Installation of Flexible Thermoplastic Sewer Pipe".
E. Storm sewer services shall be extended to within 5-feet of the building. Plug ends and mark by installing a 2" x 2" wood board from the plugged end to 4-feet out of the ground.

SANITARY SEWER

I. GENERAL

A. Sanitary sewer shall comply with all local regulations pertaining to sanitary sewer systems including materials, installation, and testing. If no regulations exist, comply with "Standard Utilities Specifications" by the City Engineers Association of Minnesota, latest edition.

II. PRODUCTS

A. Sanitary sewer pipe indicated on the plan as PVC shall be polyvinyl chloride pipe, ASTM D 3034, SDR 26, for solvent-cemented or gasket joints.
B. Sanitary sewer manholes shall be precast structures with at least two and at the most five adjusting rings.
C. Sanitary sewer castings indicated on the plan shall be from the Neenah Foundry or approved equal.

III. EXECUTION

A. The plans indicate the general location and arrangement of underground sanitary sewer systems. Location and arrangement of piping take into account many design considerations. Install piping as indicated on the plans, to the extent practical.
B. Contractor should verify locations of utility connections at the building the architectural and mechanical plans.
C. PVC sewer pipe shall be bedded in accordance with ASTM D 2321, "Recommended Practice for Underground Installation of Flexible Thermoplastic Sewer Pipe".
D. Sanitary sewer services shall be extended to within 5-feet of the building. Plug ends and mark by installing a 2" x 2" wood board from the plugged end to 4 feet out of the ground.

WATER MAIN

I. GENERAL

A. Water main shall comply with all local regulations pertaining to water main systems including materials, installation, and testing. If no local regulations exist, comply with "Standard Utilities Specifications" by the City Engineers Association of Minnesota, latest edition.

II. PRODUCTS

A. Water main, indicated on the plan as DIP, shall be ductile iron pipe, Class 55, with push on joints and shall provide electrical conductivity across each joint.
B. Water service pipe, indicated on the plans as copper, shall be ASTM B 88, Type K copper tube, with copper fittings and soldered joints.
C. All fittings shall be mechanical joint fittings.
D. Hydrants and valves shall meet all local and municipality requirements.

III. EXECUTION

A. The plans indicate the general location and arrangement of underground water main systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated, to the extent practical.
B. Bury all water main with a depth of cover of at least 8.0-feet or with the top at least 12-inches below frost penetration, which ever is greater.
C. All bends, stubs, and hydrants shall be rodded to the water main using 0.75-inch tie rods.
D. Tap water main with size and in location as indicated according to the requirements of the local water utility. The Contractor shall pay water utility fee.
E. Test all installed piping as required by the local water utility.

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

John A. Krausert Date 6-5-12
Name John A. Krausert Reg. No. 16525

Issued	
CITY SUBMITTAL	4-10-12
ADDRESS CITY COMMENTS	4-20-12
SITE PLAN REVISIONS	5-8-12
SITE PLAN REVISIONS	5-15-12
ADDRESS CITY COMMENTS	5-23-12
CONSTRUCTION DOCUMENTS	5-29-12
ADDRESS CITY COMMENTS	6-5-12

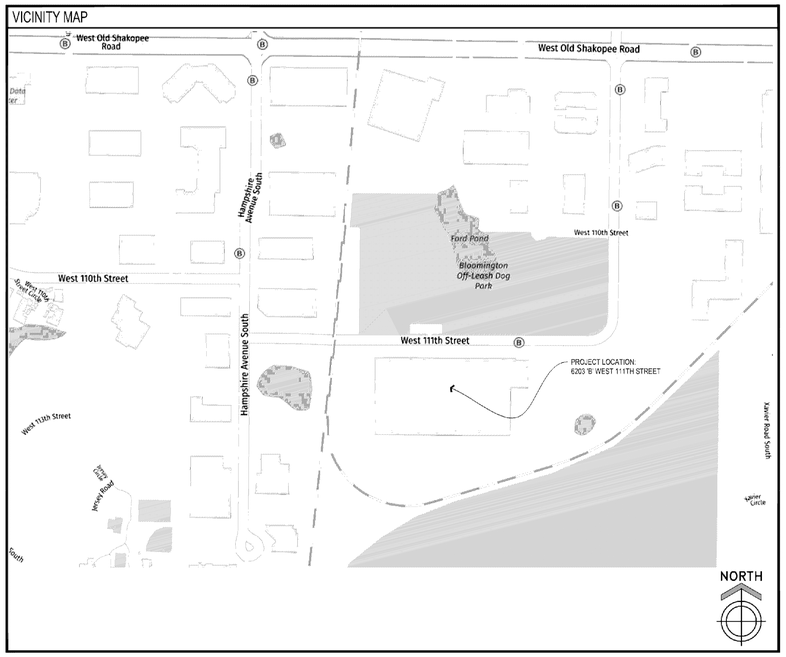
Rehder & Associates, Inc.
Civil Engineers, Planners and Land Surveyors
3440 Federal Drive, Suite 110 • Eagan, Minnesota 55122
651-452-5051• Fax: 651-452-9797 • email: info@rehder.com

PROJECT NO.: 121-0348.051 DRAWING FILE: 0348051.DWG

DETAILS & SPECIFICATIONS PLAN
BEST BUY DISTRIBUTION CENTER
CITY OF BLOOMINGTON

SHEET C4

VICINITY MAP



BID ALTERNATES

ADD ALTERNATE #1: ALL CONSTRUCTION SHOWN INSIDE DASHED BUBBLED AREA INCLUDING WILL CALL ROOM #101, OFFICE ROOM #102, OVERHEAD DOOR 100D, CONCRETE APRON & BOLLARDS AT O.H. DOOR 100D, EXTERIOR OVERHEAD CANOPY AT 100D & 101A, MAN DOOR 100C, STOOP AT DOOR 100C AND BOLLARDS & ANGLE IRON WALL PROTECTION. INCLUDES NORTHEAST PARKING AREA.

ADD ALTERNATE #2: ALL CONSTRUCTION SHOWN INSIDE DASHED BUBBLED AREA INCLUDING NORTHWEST PARKING AREA ADDITION/MODIFICATION.

ADD ALTERNATE #3: ALL CONSTRUCTION SHOWN INSIDE DASHED BUBBLED AREA INCLUDING PATIO AREA AT SW CORNER OF THE BUILDING

ADD ALTERNATE #4: ALL WALLS AND DOORS INSIDE DASHED BUBBLED AREA INCLUDING SOUND STAGE ROOM #109, LIGHTING AND RTU WORK IN THIS AREA BY BASE BID.

ADD ALTERNATE #5: ALL CONSTRUCTION SHOWN INSIDE DASHED BUBBLED AREA INCLUDING JANITOR ROOM #130 & BATH ROOM #131.

BEST BUY

STARGATE REMODEL

6203 'B' WEST 111TH STREET

BLOOMINGTON, MINNESOTA 55044

ISSUE DATE: MAY 22, 2020

THESE EXHIBIT DRAWINGS ARE INCOMPLETE UNLESS ACCOMPANIED BY OWNER'S MINIMUM BUILDING REQUIREMENT CRITERIA DOCUMENT.

DRAWING INDEX

NOTES: THESE DRAWINGS AS LISTED IN THE DRAWING INDEX ALONG WITH THE CONTRACT FOR CONSTRUCTION CONSTITUTE THE INSTRUMENTS OF SERVICE AND ARE CONSIDERED A SINGLE ENTITY. THE CONTRACTOR IS THEREFORE BOUND BY ALL INFORMATION INCLUDED.

ADDENDUM 1 05-01-2020
PERMIT SET 05-22-2020

		GENERAL	
●	●	G001	COVER SHEET
●	●	G002	CODE REVIEW PLAN
	●	G003	FLOOR PLAN - TRASH & RECYCLING
	●	G004	ENLARGED FLOOR PLANS - TRASH & RECYCLING
		CIVIL	
●	●	C400	OVERALL SITE PLAN
●	●	C401	ENLARGED SITE PLAN
●	●	C402	ENLARGED SITE PLAN
	●	C403	ENLARGED SITE PLAN
●	●	C404	PROOF OF PARKING PLAN
●	●	C500	OVERALL GRADING & DRAINAGE PLAN
●	●	C501	ENLARGED GRADING & DRAINAGE PLAN
●	●	C502	ENLARGED GRADING & DRAINAGE PLAN
●	●	C600	UTILITY PLAN
●	●	C601	CIVIL DETAILS (DELETED)
●	●	C602	CIVIL DETAILS (DELETED)
●	●	C603	CIVIL DETAILS (DELETED)
●	●	C604	CIVIL DETAILS (DELETED)
●		C700	CIVIL DETAILS
●		C701	CIVIL DETAILS
●		C702	CIVIL DETAILS
●		C703	CIVIL DETAILS
●		C704	CIVIL DETAILS
●		C705	CIVIL DETAILS
	●	L100	OVERALL LANDSCAPE PLAN
	●	L101	LANDSCAPE ENLARGEMENT NORTHWEST
	●	L102	LANDSCAPE ENLARGEMENT NORTHEAST
●	●	L103	LANDSCAPE ENLARGEMENT SOUTHWEST
●	●	L104	LANDSCAPE SCHEDULE
	●	L105	LANDSCAPE DETAILS
'16	19	SHEETS ISSUED BY DATE	
		ARCHITECTURAL	
●	●	D101	DEMOLITION FLOOR PLAN
●	●	D102	ENLARGED DEMOLITION FLOOR PLANS
	●	D201	PARTIAL EXTERIOR ELEVATIONS - DEMOLITION
	●	D202	PARTIAL EXTERIOR ELEVATIONS - DEMOLITION
●	●	A101	FLOOR PLAN
●	●	A102	ENLARGED FLOOR PLANS & DETAILS
●	●	A103	ENLARGED FLOOR PLANS & DETAILS
●	●	A104	ENLARGED FLOOR PLANS
●	●	A105	ENLARGED FLOOR PLANS
●	●	A106	ENLARGED FLOOR PLANS
●	●	A107	REFLECTED CEILING PLAN
●	●	A108	ENLARGED REFLECTED CEILING PLANS
●	●	A109	ENLARGED REFLECTED CEILING PLANS
●	●	A110	ENLARGED REFLECTED CEILING PLANS
●	●	A111	ENLARGED REFLECTED CEILING PLANS
●	●	A112	FLOORING/FINISH PLAN
●	●	A113	ENLARGED FLOORING/FINISH PLANS
	●	A114	ENLARGED FLOORING/FINISH PLANS
	●	A115	ENLARGED FLOORING/FINISH PLANS
●	●	A116	ENLARGED FLOORING/FINISH PLANS
●	●	A117	ROOF PLAN
●	●	A118	BIN & SIGN LAYOUT
●	●	A119	ENLARGED BIN & SIGN LAYOUT
	●	A120	ENLARGED BIN & SIGN LAYOUT
●	●	A121	ENLARGED BIN & SIGN LAYOUT
●	●	A122	ENLARGED BIN & SIGN LAYOUT
	●	A201	PARTIAL EXTERIOR ELEVATIONS
●	●	A202	PARTIAL EXTERIOR ELEVATIONS
●	●	A301	BUILDING SECTIONS
●	●	A302	BUILDING SECTIONS
●	●	A303	BUILDING SECTIONS & DETAILS
	●	A304	BUILDING SECTIONS & DETAILS
●	●	A401	ENLARGED RESTROOM FLOOR PLAN & ELEVS.
●	●	A402	ENLARGED RESTROOM FLOOR PLAN & ELEVS.
●	●	A501	INTERIOR ELEVATIONS & DETAILS
●	●	A601	DOOR HARDWARE & SCHEDULES
	●	A602	WALL CALL WINDOW DETAIL
32	41	SHEETS ISSUED BY DATE	
		STRUCTURAL	
	●	S1	GENERAL STRUCTURAL NOTES AND DETAILS
●	●	S2	SECTIONS AND DETAILS
	●	S3	PLANS, SECTIONS AND DETAILS
	●	S4	VESTIBULE PLAN, SECTIONS AND DETAILS
	●	S5	RTU PLACEMENT PLAN
1	5	SHEETS ISSUED BY DATE	
		FIRE PROTECTION	
●	●	FP0100	DEMOLITION FIRE PROTECTION (DELETED)
	●	FP100	FIRE PROTECTION PLAN
	●	FP200	FIRE PROTECTION ENLARGED PLAN
	●	FP201	FIRE PROTECTION ENLARGED PLAN
	4	SHEETS ISSUED BY DATE	
		MECHANICAL	
●	●	MD100	DEMOLITION CEILING PLAN
●	●	M001	HVAC PLAN
●	●	M200	ENLARGED PLANS
●	●	M201	ENLARGED PLANS
	●	M202	ENLARGED PLANS
●	●	M203	ENLARGED PLANS
●	●	M300	MECHANICAL SCHEDULES & DETAILS
●	●	M400	MECHANICAL SPECIFICATIONS
7	8	SHEETS ISSUED BY DATE	
		ELECTRICAL	
●	●	ED100	DEMOLITION LIGHTING PLAN - OVERALL
●	●	ED200	DEMOLITION POWER PLAN - OVERALL
●	●	E100	LIGHTING PLAN - OVERALL
	●	E101	LIGHTING PLAN - ENLARGED
●	●	E102	LIGHTING PLAN - ENLARGED
●	●	E200	POWER PLAN - OVERALL
●	●	E201	POWER PLAN - ENLARGED
●	●	E202	POWER PLAN - ENLARGED
	●	E300	RISER DIAGRAM
●	●	E301	PANELBOARD SCHEDULES
●	●	E400	DETAILS
●	●	E500	SCHEDULES
	●	E600	ELECTRICAL SPECIFICATIONS
	●	E601	ELECTRICAL SPECIFICATIONS
●	●	ES100	SITE PLAN
10	15	SHEETS ISSUED BY DATE	
		PLUMBING	
●	●	P001	PLUMBING PLAN
●	●	P200	ENLARGED PLANS
●	●	P201	ENLARGED PLANS
●	●	P203	ISOMETRIC DRAWINGS
	●	P203	ISOMETRIC DRAWINGS
	●	P204	DETAILS
	●	P300	SPECIFICATIONS
4	7	SHEETS ISSUED BY DATE	
70	99	TOTAL SHEETS ISSUED BY DATE	

GENERAL NOTES

1. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES IN THE DRAWINGS OR AT THE JOB SITE TO THE ARCHITECT IMMEDIATELY UPON DISCOVERY OF SUCH INCONSISTENCIES TO DETERMINE A COURSE OF ACTION TO CORRECT ANY CONFLICTS BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS AND DETERMINE COST RESPONSIBILITIES.

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT & TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE PERFORMANCE OF THE WORK.

3. CITY AND LANDLORD APPROVED PLANS SHALL BE KEPT IN A SAFE PLACE & SHALL NOT BE USED BY WORKMEN. ALL CONSTRUCTION SETS SHALL REFLECT SAME INFORMATION. THE CONTRACTOR SHALL ALSO MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA & CHANGE ORDERS ON THE PREMISES AT ALL TIMES. THESE ARE TO BE UNDER THE CARE OF THE JOB SUPERINTENDENT AND TO BE TURNED OVER AT THE END OF THE JOB.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE WHILE THE JOB IS IN PROGRESS & UNTIL THE JOB IS COMPLETED.

5. ALL DEBRIS BY GENERAL CONTRACTOR & OWNER MATERIALS SHALL BE REMOVED FROM THE PREMISES BY THE GENERAL CONTRACTOR OR RESPONSIBLE CONTRACTOR
& ALL AREAS SHALL BE LEFT IN A CLEAN (BROOM) CONDITION AT ALL TIMES.

6. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS & WORKERS AT ALL TIMES.

7. ALL DIMENSIONS ARE TO FACE OF GYPSUM BOARD UNLESS NOTED OTHERWISE. DIMENSIONS TAKE PRECEDENCE OVER DRAWING. DO NOT SCALE DRAWINGS TO DETERMINE ANY LOCATIONS. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO CONTINUING WITH WORK.

8. ALL CONSTRUCTION SHALL COMPLY WITH ALL LOCAL GOVERNING BUILDING CODES & ORDINANCES.

9. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS & SHALL MAINTAIN THE STRUCTURAL INTEGRITY OF ANY CONSTRUCTION UNTIL ALL FINISH LOAD CARRYING SYSTEMS ARE COMPLETE.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR & SHALL REPLACE OR REMEDY ANY FAULTY, IMPROPER OR INFERIOR MATERIALS OR WORKMANSHIP OR ANY DAMAGE WHICH SHALL APPEAR WITHIN ONE (1) YEAR AFTER THE COMPLETION & ACCEPTANCE OF THE WORK UNDER THIS CONTRACT.

11. ALL EXIT DOORS TO BE OPERABLE FROM THE INSIDE WITH A SINGLE EFFORT WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.

12. MAXIMUM OCCUPANCY SIGN TO BE POSTED IF REQUIRED BY LOCAL CODE. FURNISHED & INSTALLED BY OWNER. "MAXIMUM LOAD-" CONTRASTING LETTERS TO BACKGROUND.

13. COORDINATE LOCATIONS OF THE FIRE EXTINGUISHERS WITH THE LOCAL FIRE MARSHALL OR AUTHORITY AND OWNER'S CONSTRUCTION REPRESENTATIVE. FINAL LOCATIONS TO BE COORDINATED WITH FIRE MARSHALL.

14. GENERAL CONTRACTOR TO BE RESPONSIBLE FOR COST AND COORDINATION OF ALL CONSTRUCTION DUMPSTER'S AND MUST COMPLY WITH ALL BUILDING REQUIREMENTS AND GOVERNING CODES.

15. GENERAL CONTRACTOR TO BE RESPONSIBLE TO SCHEDULE AND COORDINATE ALL REQUIRED INSPECTIONS INCLUDING BUILDING, ENGINEERING AND HEALTH DEPARTMENT INSPECTIONS AND MUST SECURE A CERTIFICATE OF OCCUPANCY FROM THE CITY BY THE PROJECT COMPLETION DATE.

16. FIRE SUPPRESSION CONTRACTOR TO PROVIDE SUPPRESSION DRAWINGS AS A DEFERRED SUBMITTAL

BEST BUY PROJECT TEAM

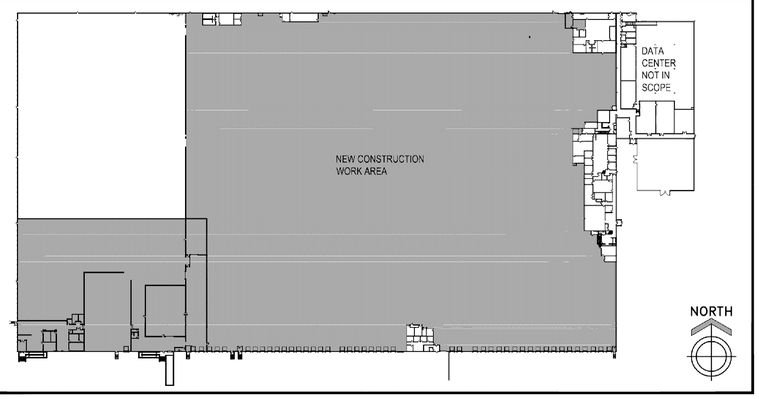
REAL ESTATE MANAGER	BBY DEVELOPMENT MANAGER
BEST BUY 7601 PENN AVENUE SOUTH RICHFIELD, MN 55423 CONTACT: KATE BEINE PH: (612) 669-5306 kate.beine@bestbuy.com	BEST BUY 7601 PENN AVENUE SOUTH RICHFIELD, MN 55423 CONTACT: BRENDON STUCKEY PH: (612) 291-7541 brendon.stuckey@bestbuy.com
CONSTRUCTION PROJECT MANAGER	ASBESTOS SURVEY
BEST BUY 7601 PENN AVENUE SOUTH RICHFIELD, MN 55423 CONTACT: JEFF SPORRE PH: (612) 291-7486 jeff.sporre@bestbuy.com	TERRACON CONSULTANTS, INC. 13400 15TH AVE N PLYMOUTH, MN 56441-4532 CONTACT: MICHAEL J WILLEY PH: 763-489-3100 mike.willey@terracon.com
LANDLORD	CONSTRUCTION COMPANY
FIRST INDUSTRIAL REALTY TRUST, INC. 10140 WEST 76TH STREET EDEN PRAIRIE, MN 55344 CONTACT: JIM SCHLUNDT PH: (952) 852-7171 jschlundt@firstindustrial.com	TBD TBD TBD TBD TBD
ARCHITECT	CIVIL ENGINEER
REPRISE DESIGN PORTLAND CORPORATE CENTER 10400 PORTLAND AVE. S. SUITE 100 BURNSVILLE, MN 55337 CONTACT: JIM HERGET PH: (952) 562-3721 FAX: (952) 252-4043 jherget@reprisedesign.com	KIMLEY-HORN 767 EUSTIS STREET, SUITE 100 ST. PAUL, MN 55114 PH: 651-645-4197 CONTACT: TRISH SIEH-PE PH: (651)643-0470 MOBILE: (540) 449-9698 trisha.sieh@kimley-horn.com
MEP ENGINEER	STRUCTURAL ENGINEER
EMANUELSON-PODAS 7705 BUSH LAKE ROAD EDINA, MN 55439 CONTACT: WENDY WENBORG PH: 952-893-0050 EMAIL: wwenborg@epinc.com	VOIGT & ASSOCIATES 4635 NICOLS ROAD EAGAN, MN 55122 CONTACT: PAUL VOIGT PH: 651-686-7727 pvoigt@voigtandassociates.com
FIRE PROTECTION	
DESIGN BUILD	

NATIONAL ACCOUNTS VENDOR CONTACT LIST

PRODUCTS	SUPPLIER	CONTACT	ADDRESS	PHONE	EMAIL
DOCK DOORS	RAYNOR GARAGE DOORS	VIKKI GIPSON	1101 EAST RIVER ROAD DIXON, IL 61021	888.472.9667 X7364	VVANPELT@RAYNOR.COM
DOORS, FRAMES, HARDWARE, DELIVERY CAGES	TWIN CITY HARDWARE	JIM MCDONALD BOB HAEN	723 HADLEY AVE NORTH OAKDALE, MN 55128	651.261.0225 651.731.7132	JMCDONALD@TCHCO.COM BHAEN@TCHCO.COM
KEYS & CORES	TWIN CITY HARDWARE	LUCIO GRIJALVA JIM MCDONALD	723 HADLEY AVE NORTH OAKDALE, MN 55128	688.747.1989 651.261.0225	LGRIJALVA@TCHCO.COM JMCDONALD@TCHCO.COM
ELECTRIFIED OPENINGS, HARDWARE & ACCESS CONTROL SYSTEMS	TWIN CITY HARDWARE	DAN SIROIN JASON KEIGER	723 HADLEY AVE NORTH OAKDALE, MN 55128	651.707.2317	DSIROIN@TCHCO.COM JKEIGER@TCHCO.COM
TURNOVERS, TOB SERVICE & INSTALLATION	TWIN CITY HARDWARE	LUCIO GRIJALVA MICHELLE ROSENBUSH	723 HADLEY AVE NORTH OAKDALE, MN 55128	688.747.1989 651.731.7164	LGRIJALVA@TCHCO.COM FS@TCHCO.COM
LOADING DOCK EQUIPMENT & RASCO AIR GATES, GUARD RAILS, COLUMN PROTECTORS, HVLS	STAR EQUIPMENT, INC	RANDY RENNAKER	248 APOLLO DRIVE LINO LAKES, MN 55014	612.710.1469	RANDYR@STAREQUIPMENT.COM
DOCK LIGHT & FAN	PATTERSON FAN	RANDY RENNAKER	248 APOLLO DRIVE LINO LAKES, MN 55014	612.710.1469	RANDYR@STAREQUIPMENT.COM
BALERS, DENSIFIER, PRE-BREAKER, TRASH COMPACTOR, TIPPER	JWR INC	CORY GARDNER	322 N WATERTOWN STREET JOHNSON CREEK, WI 53038	920.988.5769	CORY@JWRINC.NET
RESTROOM ACCESSORIES - HAND SOAP DISPENSERS	BETCO	PAM TOLFORD		888.667.9016	PTOLFORD@BETCO.COM
RESTROOM ACCESSORIES - TOILET TISSUE DISPENSERS, ROLL TOWEL DISPENSERS, AIR FRESHENERS, DIAPER CHANGING TABLES & TOILET SEAT COVER DISPENSERS	OFFICE DEPOT	BRAD BROMAN	1106 XENIUM LAND #100 PLYMOUTH, MN 55441	612.940.3812	BRAD.BROMAN@OFFICEDEPOT.COM
RESTROOM ACCESSORIES - SANITARY NAPKIN DISPOSAL UNITS	TWIN CITY HARDWARE	BOB HAEN	723 HADLEY AVE NORTH OAKDALE, MN 55128	651.731.7132	BHAEN@TCHCO.COM
CAMERAS & SECURITY SYSTEM, BURG PLAN	ADT	JOHN BRENDEL	4221 WEST JOHN CARPENTER FREEWAY IRVING, TX 75063	612.346.1753	JOHNBRENDEL@ADT.COM
EXTERIOR BUILDING/SITE SIGNAGE	EVERBRITE	SAMANTHA CANNON PATRICIA FINN (PATTY)	4949 S 110TH STREET GREENFIELD, WI 53228	414.529.7292 414.529.7852	SCANNON@EVERBRITE.COM PFINN@EVERBRITE.COM
INTERIOR RACKING & FLOOR BIN IDENTIFIERS (TWO OPTIONS)	ID LABEL, INC ASG SERVICES, INC	MEEGAN JOHNSTON DAVE KLUMP	425 PARK AVE, LAKE VILLA, IL 60046 3120 MEDLOCK BRIDE RD, BLDG D, NORCROSS, GA 30071	847.265.1200 770.447.5498	MJOHNSTON@IDLABELINC.COM DAVE.KLUMP@ASGSERVICES.COM
WAREHOUSE STRIPING	ID LABEL, INC ASG SERVICES, INC	MEEGAN JOHNSTON DAVE KLUMP	425 PARK AVE, LAKE VILLA, IL 60046 3120 MEDLOCK BRIDE RD, BLDG D, NORCROSS, GA 30071	847.265.1200 770.447.5498	MJOHNSTON@IDLABELINC.COM DAVE.KLUMP@ASGSERVICES.COM
HVAC - @ CONDITIONED OFFICE SPACE &SPLIT SYSTEM @ TELECOM ROOM	LENNOX	DAVID EBNER	15633 APLINE CIRCLE BURNSVILLE, MN 55306	612.860.5933	DAVE.EBNER@LENNOXIND.COM
*WAREHOUSE HEATING ELEMENTS	CAMBRIDGE ENGINEERING			800.899.1989	
METAL DETECTOR	CEIA USA	AL ZIVIC		440.725.2065	AZIVIC@CEIA-USA.COM

* NOT REQUIRED IN HOT CLIMATES

KEY PLAN



ABBREVIATIONS

A		COL	COLUMN	FDN	FOUNDATION	J		MO	MASONRY OPENING	RCP	REFLECTED CEILING PLAN
ACT	ACOUSTICAL CEILING TILE	CONC	CONCRETE	FE	FIRE EXTINGUISHER	JAN	JANITOR	N		RD	ROOF DRAIN
ADJ	ADJACENT	CONT	CONTINUOUS	FEC	FIRE EXTINGUISHER CABINET	JST	JOIST	N	NORTH	RECEP	RECEPTION
ADMIN	ADMINISTRATION	COORD	COORDINATE	FIN	FINISH	JT	JOINT	NIC	NOT IN CONTRACT	RECPT	RECEPTACLE
AFF	ABOVE FINISHED FLOOR	CTR	CENTER	FL	FLOOR	K		NO #	NUMBER	RECT	RECTANGULAR
AFG	ABOVE FINISHED GRADE	D		FM	FROM FACTORY MUTUAL RESEARCH CORP	KO	KNOCKOUT	NOM	NOMINAL	REINF	REINFORCED
AGG	AGGREGATE	db	DECIBEL	FO	FACE OF	KP	KICK PLATE	NSO	NEW STORE OPENING	REQD	REQUIRED
AHJ	AUTHORITY HAVING JURISDICTION	DEPT	DEPARTMENT	FOIC	FURNISHED BY OWNER, INSTALLED BY CONTRACTOR	L		NTS	NOT TO SCALE	RES	RESILIENT
AL	ALUMINUM	DET	DETAIL	FOIO	FURNISHED BY OWNER, INSTALLED BY OWNER	LAM	LAMINATED	O		REV	REVISION
ALT	ALTERNATE/ALTERATION	DF	DRINKING FOUNTAIN	FRT	FIRE RETARDANT TREATED	LAV	LAVATORY	OC	ON-CENTER	RM	ROOM
ANOD	ANODIZED	DIA	DIAMETER/DIAGONAL	FT	FOOT OR FEET	LKR	LOCKER	OFC	OVERFLOW DRAIN	RO	ROUGH OPENING
	APPROXIMATE	DIM	DIMENSION	FTG	FOOTING	LL	LIVE LOAD	OPNG	OPENING	ROW	RIGHT OF WAY
ARCH	ARCHITECT/ARCHITECTURAL	DN	DOWN	FURN	FURNACE/FURNISH	LP	LOW POINT	OPP	OPPOSITE	RWL	RAINWATER LEADER
ASPH	ASPHALT	DSP	DOWNSPOUT	FURR	FURRING	LP	LOSS PREVENTION	P		S	
AVE	AVENUE	DWG	DRAWING	G		LT	LIGHT	P	PEGAST	SAN	SANITARY
B		E		GA	GAUGE	LTWT	LIGHTWEIGHT	PERF	PERFORATED	SC	SOLID CORE
BBY	BEST BUY STORES L.P.	EA	EACH	GALV	GALVANIZED	M		PH	PHASE	SCD	SCHEDULE
BC	BOTTOM OF CURB	EIFS	EXTERIOR INSULATION & FINISH SYSTEM	GB	GRAB BAR	MAINT	MAINTENANCE/ MAINTAIN	PL	PLASTIC LAMINATE	SECT	SECTION
BD	BOARD	EJ	EXPANSION JOINT	GYP	GYPSUM	MAS	MASONRY	PLYW	PLYWOOD	SF	SQUARE FEET
BLDG	BUILDING	EL	ELEVATION	H		MAT	MATERIAL	PNL	PANEL	SHT	SHEET
BLKG	BLOCKING	ELEC	ELECTRICAL	H	HIGH	MAX	MAXIMUM	PP	PUSH PLATE	SPEC	SPECIFICATION
BLVD	BOULEVARD	EMERG	EMERGENCY	HB	HOSE BIB	MDC	MAGNOLIA DESIGN CENTER	PR	PAIR	SQ	SQUARE
BO	BOTTOM OF	EP	ELECTRICAL PANELBOARD/ END PANEL	HC	HAND CAPPED/HOLLOW CORE WOOD	MECH	MECHANICAL	PT	PRESSURE TREATED	SS	SERVICE SINK
BRG	BEARING	EQ	EQUAL	HM	HOLLOW METAL	MEMB	MEMBRANE	PREFAB	PREFABRICATED	SST	STAINLESS STEEL
BTWN	BETWEEN	EXST (E)	EXISTING TO REMAIN	HORIZ	HORIZONTAL	MHT	MAGNOLIA HOME THEATER	PTN	PARTITION	ST	STONE
C		EXT	EXTERIOR	I		MI	MUSICAL INSTRUMENT	PVMT	PAVEMENT	STD	STANDARD
CJ	CONTROL JOINT	F		INSUL	INSULATION	MP	METAL PANEL	Q		STL	STEEL
CL	CENTERLINE	FCIC	FURNISHED AND INSTALLED BY CONTRACTOR	INT	INTERIOR	MT	ENTRY MATT CARPET TILE	QTR	QUARTER	STOR	STORAGE
CLG	CEILING	FD	FLOOR DRAIN	SC	INSTALLATION SERVICE CENTER	MTL	METAL	R		SURF	SURFACE
CLKG	CAULKING	FDC	FIRE DEPARTMENT			MEZZ	MEZZANINE	RAD	RADIUS	SUSP	SUSPENDED
CMU	CONCRETE MASONRY UNITS					MFR	MANUFACTURER	RB	RUBBER BASE	SYM	SYMMETRICAL
CO	CLEAN OUT					MIR	MIRROR			T	

TEL	TELEPHONE										
TEMP	TEMPERARY										
THK	THICK										
THS	THRESHOLD										
TO	TOP OF										
TOIL	TOILET										
TOL	TOLERANCE										
TYP	TYPICAL										
U											
UBC	UNIFORM BUILDING CODE										
UNFIN	UNFINISHED										
UNO	UNLESS NOTED OTHERWISE										
UTILITY	UTILITY										
V											
VAR	VARIES										
VERT	VERTICAL										
V.I.F.	VERIFY IN FIELD										
VOL	VOLUME										
VCT	VINYL COMPOSITE TILE										
W											
W	WATT										
W/O	WITHOUT										
W/	WITH										
WAIN	WAINSCOT										
WC	WATER CLOSET										
WD	WOOD										
WH	WATER HEATER										

reprise Architecture, Inc.
11400 Portland Avenue South
Suite 100, Portland Corporate Center
Burnsville, MN 55337
Office: 952.252.4045
Fax: 952.252.4046

DESIGN

I hereby certify that this plan, specification or report was prepared by me or under my direct ARCHITECT supervision and that I am a duly Registered Architect under the laws of the State of MINNESOTA.

Signature
Jeffrey K. Johnson
18590
06/01/20
Date
Registration Number

STARGATE - BLOOMINGTON
TENANT REMODELING IN EXISTING TENANT SPACE
6203 'B' WEST 111TH STREET
BLOOMINGTON, MN 55438

COVER SHEET

BEST BUY

DATE ISSUED	
PERMIT SET	05/22/20
ADDENDUM 1 ⚠1	06/01/20
-	
-	
-	

DRAWN BY	JP/HND
CHECKED BY	JH
JOB NO.	19246

G001

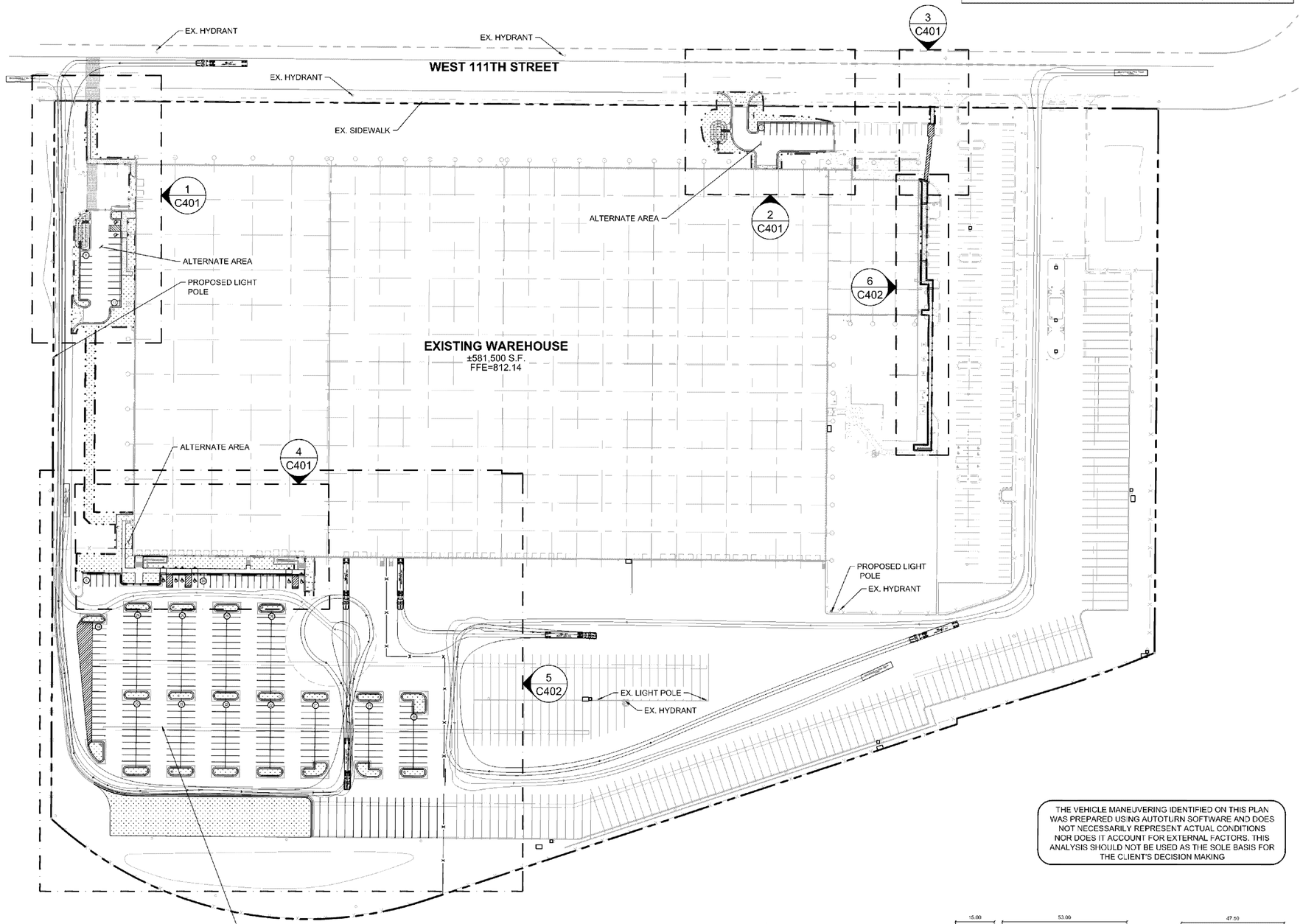
ALTERNATES LIST:
ALT #1: NORTHEAST PARKING AREA, NEW WILL CALL VESTIBULE, AND WILL CALL OVERHEAD DOOR

ALT #2: NORTHWEST PARKING AREA ADDITION/MODIFICATION

ALT #3: PATIO AREA AT SOUTHWEST CORNER OF THE BUILDING

ALT #4: STUDIO STAGE AREA WALL CONSTRUCTION (ARCHITECTURAL)

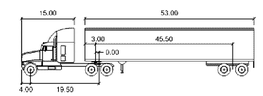
ALT #5: STUDIO AREA SHOWER ROOM AND JANITOR CLOSET (ARCHITECTURAL)



THE VEHICLE MANEUVERING IDENTIFIED ON THIS PLAN WAS PREPARED USING AUTOTURN SOFTWARE AND DOES NOT NECESSARILY REPRESENT ACTUAL CONDITIONS NOR DOES IT ACCOUNT FOR EXTERNAL FACTORS. THIS ANALYSIS SHOULD NOT BE USED AS THE SOLE BASIS FOR THE CLIENT'S DECISION MAKING

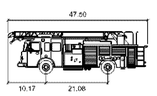
NORTH

GRAPHIC SCALE IN FEET
0 40 80 160



WB-67

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		



Bloomington Fire Truck

	feet
Width	: 8.33
Track	: 8.33
Lock to Lock Time	: 9.0
Steering Angle	: 40.0

1

LEGEND

- PROPERTY LINE
- PROPOSED CHAIN LINK FENCE
- SETBACK LINE
- RETAINING WALL
- PROPOSED CURB AND GUTTER
- PROPOSED LANDSCAPING
- PROPOSED STANDARD DUTY ASPHALT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED STORMWATER MANAGEMENT AREA
- PROPOSED CONCRETE SIDEWALK
- REMOVE AND REPLACE EXISTING PAVEMENT OR CURB AND GUTTER FOR PROPOSED UTILITY SERVICE EXCAVATIONS, MATCH EXISTING PAVEMENT SECTION PER CITY OF BLOOMINGTON STANDARDS AND RE-STRIPE PAVEMENT MARKINGS
- BID ALTERNATE AREA

PROPERTY SUMMARY

BEST BUY DISTRIBUTION CENTER	
TOTAL PROPERTY AREA	1,611,728 SF (37.00 AC)
ADDED IMPERVIOUS AREA	24,632 SF (0.56 AC)
ADDED PERVIOUS AREA	27,370 SF (0.63 AC)
ZONING SUMMARY	
EXISTING ZONING	IP - INDUSTRIAL PARK
PROPOSED ZONING	IP - INDUSTRIAL PARK
PARKING	
EXISTING PARKING	228 SPACES
PROPOSED PARKING	332 SPACES
PROOF OF PARKING	377 SPACES
TOTAL PARKING	937 SPACES
ADA STALLS REQ'D / PROVIDED	12 STALLS / 13 STALLS

SITE PLAN NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
3. ALL INNER CURBED RADII ARE TO BE 3' AND OUTER CURBED RADII ARE TO BE 10' UNLESS OTHERWISE NOTED. STRIPED RADII ARE TO BE 5'.
4. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
5. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
7. SITE BOUNDARY, TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY EFN, DATED 01/22/2020. SURVEY BASED ON NAVD88 DATUM.

   KIMLEY-HORN ASSUMES NO LIABILITY FOR ANY ERRORS, INACCURACIES, OR OMISSIONS CONTAINED THEREIN.
8. PYLON / MONUMENT SIGNS SHALL BE CONSTRUCTED BY OTHERS. SIGNS ARE SHOWN FOR GRAPHICAL & INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY SIZE, LOCATION AND ANY REQUIRED PERMITS NECESSARY FOR THE CONSTRUCTION OF THE PYLON / MONUMENT SIGN.
9. CONTRACTOR SHALL REFERENCE ARCH / MEP PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN.
10. NO PROPOSED LANDSCAPING SUCH AS TREES OR SHRUBS, ABOVE AND UNDERGROUND STRUCTURES, OR OTHER OBSTRUCTIONS SHALL BE LOCATED WITHIN EXISTING OR PROPOSED UTILITY EASEMENTS AND RIGHTS OF WAY UNLESS SPECIFICALLY NOTED ON PLANS OTHERWISE.
11. REFERENCE ARCHITECTURAL PLANS FOR DUMPSTER ENCLOSURE DETAILS.
12. REFER TO FINAL PLAT OR ALTA SURVEY FOR EXACT LOT AND PROPERTY BOUNDARY DIMENSIONS.
13. ALL AREAS ARE ROUNDED TO THE NEAREST SQUARE FOOT.
14. ALL DIMENSIONS ARE ROUNDED TO THE NEAREST TENTH FOOT.
15. ALL PARKING STALLS TO BE 9' IN WIDTH AND 20' IN LENGTH UNLESS OTHERWISE INDICATED.
16. CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT FOR OBSTRUCTIONS AND CONCRETE WORK WITHIN THE RIGHT-OF-WAY. PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION. CONTACT SEAN JENKINS (952-563-4545, SJENKINS@BLOOMINGTONMN.GOV) FOR PERMIT INFORMATION.
17. ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING AND STORAGE OF EQUIPMENT AND MATERIALS MUST BE ON-SITE. USE OF PUBLIC STREETS FOR PRIVATE CONSTRUCTION PARKING, LOADING/UNLOADING, AND STORAGE WILL NOT BE ALLOWED.

No.	DATE	BY
2	06/05/2020	BPG
1	06/01/2020	BPG

REVISIONS

Kimley»Horn
©2020 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100
ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

reprise DESIGN

BEST BUY

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PATRICIA D. SIEH
MN LIC. NO. 49848
DATE: 4/30/2020

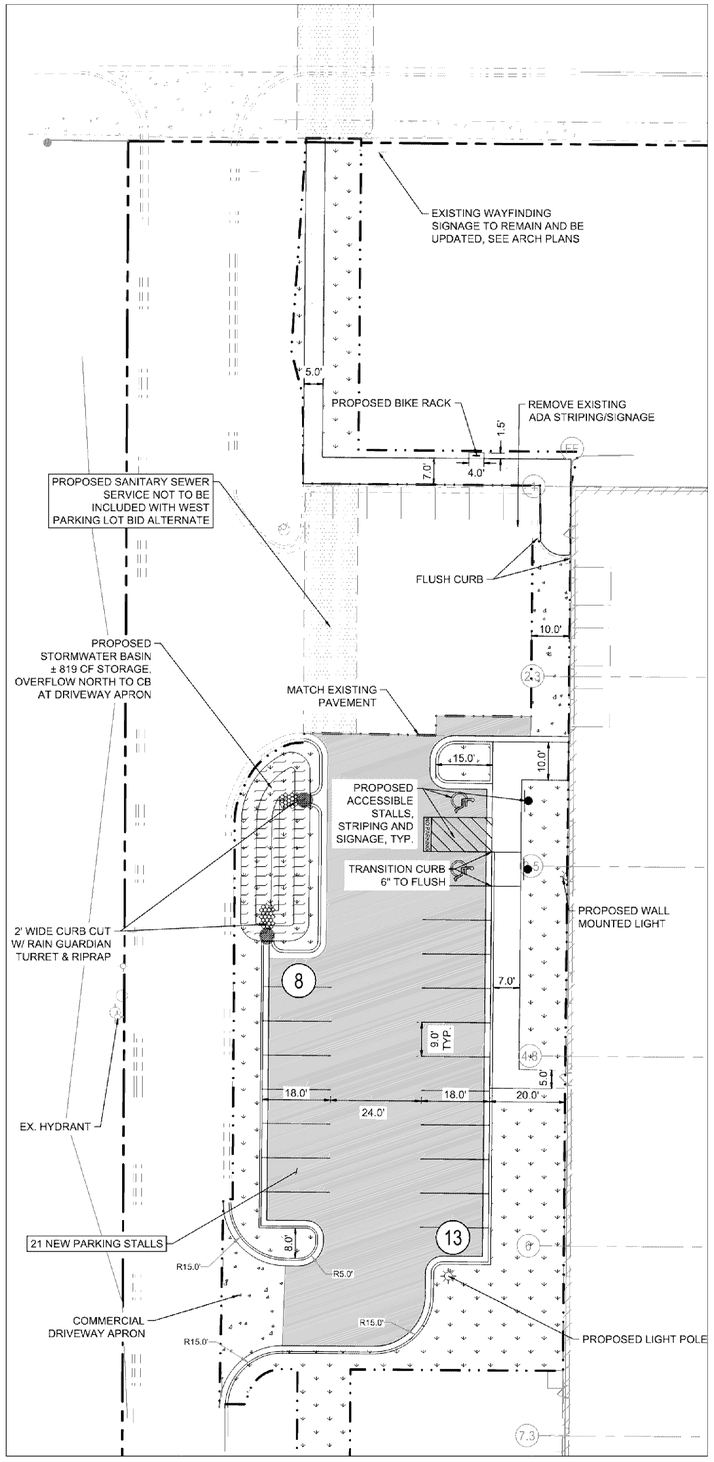
KHA PROJECT	
160167000	
DATE	06/05/2020
SCALE	AS SHOWN
DESIGNED BY	BPG
DRAWN BY	BPG
CHECKED BY	TDS

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

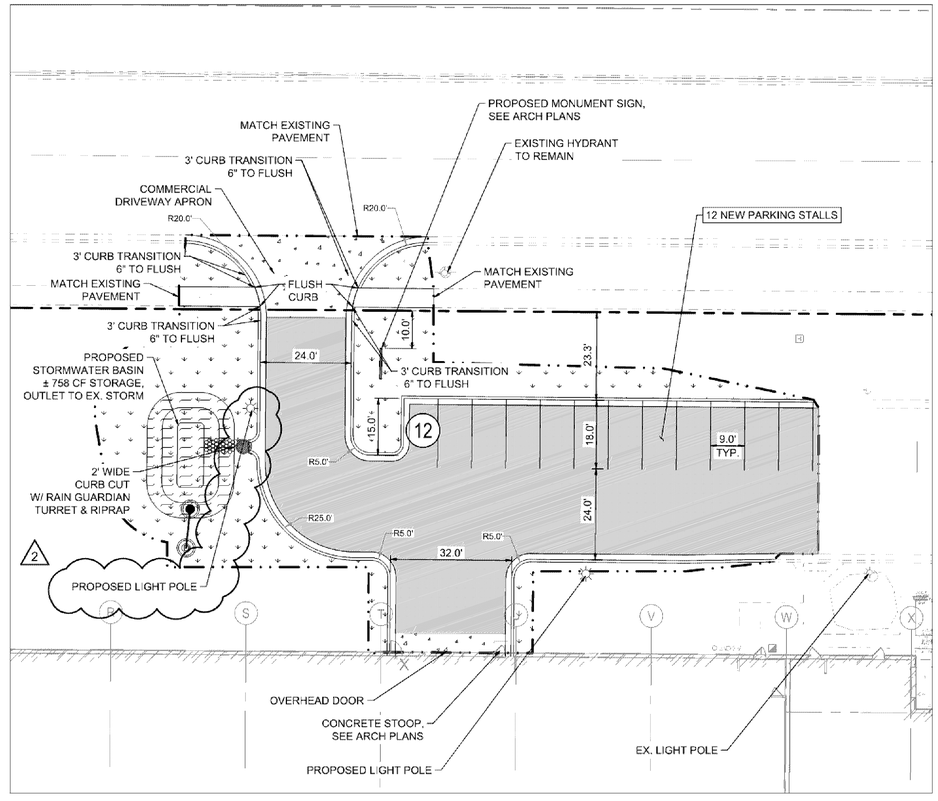
OVERALL SITE PLAN

BEST BUY
DISTRIBUTION CENTER
PREPARED FOR
REPRISE DESIGN
BLOOMINGTON MN

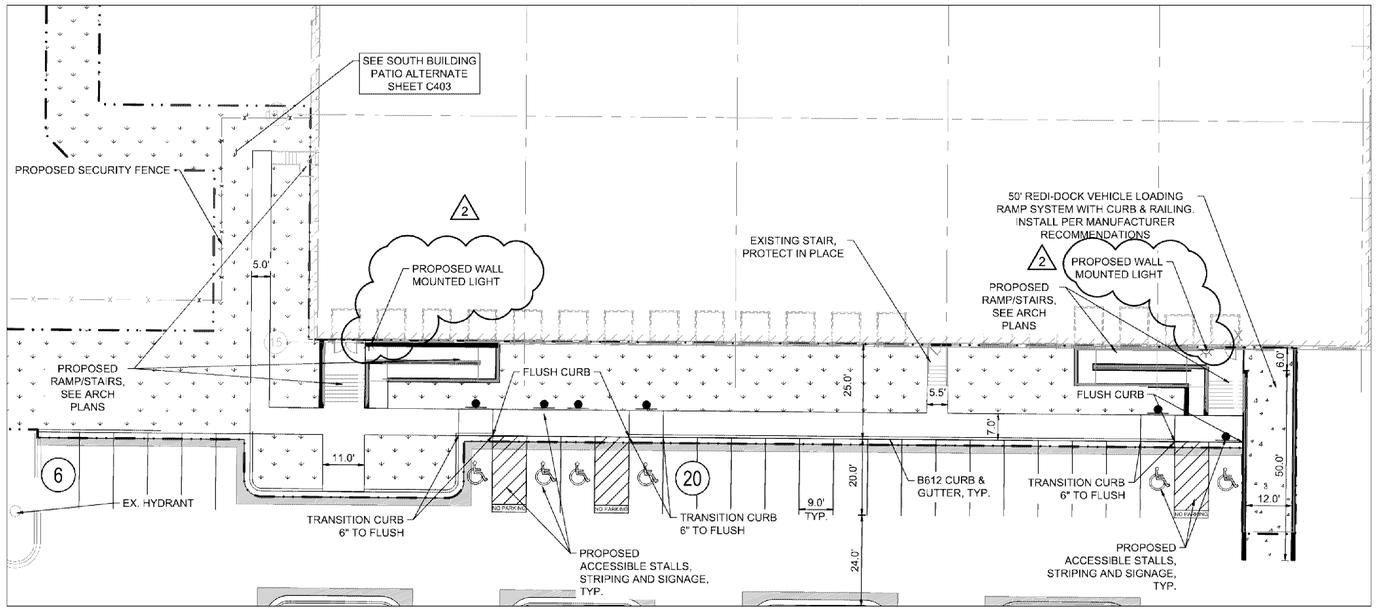
SHEET NUMBER
C400



1 NORTHWEST PARKING LOT (ALT #2)
1:20



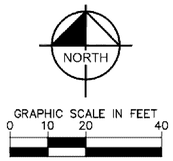
2 NORTHEAST PARKING LOT (ALT #1)
1:20



4 SOUTH BUILDING ACCESS
1:20

LEGEND

- PROPERTY LINE
- PROPOSED CHAIN LINK FENCE
- SETBACK LINE
- RETAINING WALL
- PROPOSED CURB AND GUTTER
- PROPOSED LANDSCAPING
- PROPOSED STANDARD DUTY ASPHALT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED STORMWATER BASIN
- PROPOSED CONCRETE SIDEWALK
- REMOVE AND REPLACE EXISTING PAVEMENT OR CURB AND GUTTER FOR PROPOSED UTILITY SERVICE EXCAVATIONS, MATCH EXISTING PAVEMENT SECTION PER CITY OF BLOOMINGTON STANDARDS AND RE-STRIPE PARKING STALLS



No.	REVISIONS	DATE	BY
2	ADDENDUM 2	06/05/2020	BPG
1	ADDENDUM 1	06/01/2020	BPG

Kimley»Horn
©2020 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100
ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

reprise DESIGN

BEST BUY

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PATRICIA D. SIEH
DATE: 4/30/2020
MN LIC. NO. 49846

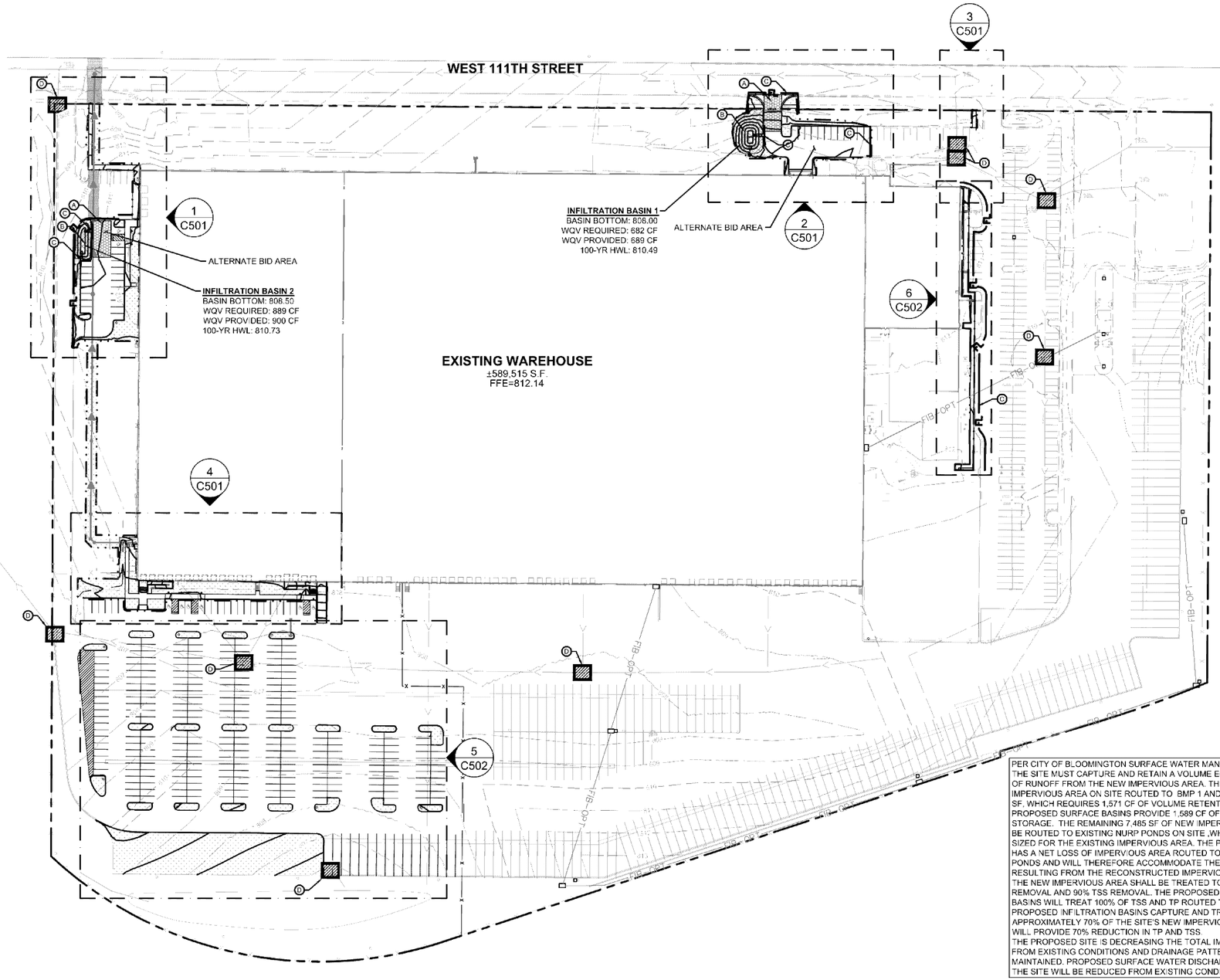
KHA PROJECT	162167000
DATE	06/05/2020
SCALE	AS SHOWN
DESIGNED BY	BPG
DRAWN BY	BPG
CHECKED BY	TDS

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

BEST BUY
DISTRIBUTION CENTER
PREPARED FOR
REPRISE DESIGN
BLOOMINGTON MN

ENLARGED SITE PLAN

SHEET NUMBER
C401



GRADING LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- EXISTING CONTOUR
- 925 PROPOSED CONTOUR
- PROPOSED ADA PATH, REF. NOTE 15
- PROPOSED STORM MANHOLE (SOLID CASTING)
- PROPOSED STORM MANHOLE (ROUND INLET CASTING)
- PROPOSED STORM MANHOLE/ CATCH BASIN (CURB INLET CASTING)
- PROPOSED STORM SEWER CLENOUT
- PROPOSED FLARED END SECTION
- PROPOSED RIPRAP
- PROPOSED STORM SEWER
- 100.00 PROPOSED SPOT ELEVATION
- HP 0.0 PROPOSED HIGH POINT ELEVATION
- LP 0.0 PROPOSED LOW POINT ELEVATION
- G 0.00 PROPOSED GUTTER ELEVATION
- T 0.00 PROPOSED TOP OF CURB ELEVATION
- T/G 0.00 PROPOSED FLUSH PAVEMENT ELEVATION
- ME 0.0 MATCH EXISTING ELEVATION
- EOF 0.0 PROPOSED EMERGENCY OVERFLOW
- 0.0% PROPOSED DRAINAGE DIRECTION
- 0.00% PROPOSED ADA SLOPE

GRADING PLAN NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF BLOOMINGTON, SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
2. CONTRACTOR TO CALL GOPHER STATE CALL ONE @ <1-800-252-1166> AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION/CONSTRUCTION FOR UTILITY LOCATIONS.
3. STORM SEWER PIPE SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76
   HDPE: 6" - 10" PER AASHTO M-252
   HDPE: 12" OR GREATER PER ASTM F-2306
   PVC SCH. 40 PER ASTM D-3034
   STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
   RCP PER ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443
   HDPE PER ASTM 3212
   PVC PER ASTM D-3034, JOINTS PER ASTM D-3212
4. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
5. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER EXCAVATION TO HELP OFFSET ANY STABILITY PROBLEMS DUE TO WATER SEEPAGE OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING OF EXISTING PAVEMENT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
7. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
8. GRADES SHOWN ARE FINISHED GRADES. CONTRACTOR SHALL ROUGH GRADE TO SUBGRADE ELEVATION AND LEAVE STREET READY FOR SUBBASE.
9. ALL EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ANY ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
10. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTING / STRUCTURE NOTATION.
11. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF PAVEMENTS AND CURB AND GUTTER WITH SMOOTH UNIFORM SLOPES TO PROVIDE POSITIVE DRAINAGE.
12. INSTALL A MINIMUM OF 4" CLASS 5 AGGREGATE BASE UNDER CURB AND GUTTER AND CONCRETE SIDEWALKS.
13. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL STREETS AND DISTURBED AREAS ON SITE. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 6" OF TOPSOIL.
14. ALL SPOT ELEVATIONS/CONTOURS ARE TO GUTTER / FLOW LINE UNLESS OTHERWISE NOTED.
15. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2% . IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
16. MAINTAIN A MINIMUM OF 0.5% GUTTER SLOPE TOWARDS LOW POINTS.
17. CONTRACTOR TO PROVIDE 3" INSULATION BY 5' WIDE CENTERED ON STORM PIPE IF LESS THAN 4' OF COVER IN PAVEMENT AREAS AND LESS THAN 3' OF COVER IN LANDSCAPE AREAS.
18. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
19. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
20. MAINTAIN A MINIMUM OF 1.25% SLOPE IN BITUMINOUS PAVEMENT AREAS, 0.5% SLOPE IN CONCRETE PAVEMENT AREAS.
21. CONTRACTOR SHALL REVIEW PAVEMENT GRADIENT AND CONSTRUCT "INFALL CURB" WHERE PAVEMENT DRAINS TOWARD GUTTER, AND "OUTFALL" CURB WHERE PAVEMENT DRAINS AWAY FROM GUTTER.
22. HDPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES MUST BE MADE WITH WATERTIGHT MATERIALS UTILIZING AN A-LOK OR WATERSTOP GASKET OR BOOT, CAST-IN-PLACE RUBBER BOOT, OR APPROVED EQUAL. WHERE THE ALIGNMENT PRECLUDES THE USE OF THE ABOVE APPROVED WATERTIGHT METHODS, CONSEAL 231 WATERSTOP SEALANT, OR APPROVED EQUAL WILL ONLY BE ALLOWED AS APPROVED BY THE ENGINEER.

PER CITY OF BLOOMINGTON SURFACE WATER MANAGEMENT PLAN, THE SITE MUST CAPTURE AND RETAIN A VOLUME EQUIVALENT OF 1.1" OF RUNOFF FROM THE NEW IMPERVIOUS AREA. THE TOTAL NEW IMPERVIOUS AREA ON SITE ROUTED TO BMP 1 AND BMP 2 IS 17,147 SF, WHICH REQUIRES 1,571 CF OF VOLUME RETENTION. THE PROPOSED SURFACE BASINS PROVIDE 1,589 CF OF SURFACE STORAGE. THE REMAINING 7,485 SF OF NEW IMPERVIOUS AREA WILL BE ROUTED TO EXISTING NURP PONDS ON SITE ,WHICH HAVE BEEN SIZED FOR THE EXISTING IMPERVIOUS AREA. THE PROPOSED SITE HAS A NET LOSS OF IMPERVIOUS AREA ROUTED TO THESE EXISTING PONDS AND WILL THEREFORE ACCOMMODATE THE RUNOFF VOLUME RESULTING FROM THE RECONSTRUCTED IMPERVIOUS AREA.
THE NEW IMPERVIOUS AREA SHALL BE TREATED TO AT LEAST 60% TP REMOVAL AND 90% TSS REMOVAL. THE PROPOSED INFILTRATION BASINS WILL TREAT 100% OF TSS AND TP ROUTED TO THEM. THE PROPOSED INFILTRATION BASINS CAPTURE AND TREAT APPROXIMATELY 70% OF THE SITE'S NEW IMPERVIOUS AREA AND WILL PROVIDE 70% REDUCTION IN TP AND TSS.
THE PROPOSED SITE IS DECREASING THE TOTAL IMPERVIOUS AREA FROM EXISTING CONDITIONS AND DRAINAGE PATTERNS ARE BEING MAINTAINED. PROPOSED SURFACE WATER DISCHARGE RATES FOR THE SITE WILL BE REDUCED FROM EXISTING CONDITIONS.

EROSION CONTROL LEGEND

- ROCK ENTRANCE
- EROSION CONTROL BLANKET
- INLET PROTECTION
- FL FILTER LOG
- LIMITS OF DISTURBANCE
- x x SAFETY FENCE

KEYNOTE LEGEND

- (A) CONSTRUCTION ENTRANCE
- (B) EROSION CONTROL BLANKET
- (C) FILTER LOG, OFFSET FROM BACK OF CURB FOR CLARITY
- (D) INLET PROTECTION

EROSION CONTROL PLAN NOTES

1. ALL PERIMETER SILT FENCE AND ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR SHALL CONSTRUCT DRAINAGE BASINS PRIOR TO SITE GRADING.
3. THE CONTRACTOR SHALL INSTALL CATCH BASIN EROSION CONTROL MEASURES.
4. WITHIN ONE WEEK (7 DAYS) OF SITE GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED WITH SEED, SOD, OR ROCK BASE. REFER TO LANDSCAPE PLANS FOR MATERIALS.
5. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY, STATE, AND WATERSHED DISTRICT PERMITS.
6. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES, INCLUDING THE REMOVAL OF SILT IN FRONT OF SILT FENCES DURING THE DURATION OF THE CONSTRUCTION.
7. ANY EXCESS SEDIMENT IN PROPOSED BASINS SHALL BE REMOVED BY THE CONTRACTOR.
8. REMOVAL ALL EROSION CONTROL MEASURES AFTER VEGETATION IS ESTABLISHED.
9. THE CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENT TRACKED ONTO EXISTING STREETS AND PAVED AREAS AND SHALL SWEEP ADJACENT STREETS AS NECESSARY IN ACCORDANCE WITH CITY REQUIREMENTS.
10. IF BLOWING DUST BECOMES A NUISANCE, THE CONTRACTOR SHALL APPLY WATER FROM A TANK TRUCK TO ALL CONSTRUCTION AREAS.

SEQUENCE OF CONSTRUCTION:

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

BMP AND EROSION CONTROL INSTALLATION SEQUENCE SHALL BE AS FOLLOWS:

1. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE.
2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, UNDERGROUND SYSTEM, CURBS AND GUTTERS.
3. INSTALL APPROPRIATE INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.
4. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
5. PREPARE SITE FOR PAVING.
6. PAVE SITE AND INSTALL STRIPING.
7. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
8. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
9. OBTAIN CONCURRENCE WITH THE CIVIL ENGINEERING CONSULTANT THAT THE SITE HAS BEEN FULLY STABILIZED THEN:
   1. REMOVE ALL REMAINING TEMPORARY EROSION ADN SEDIMENT CONTROL DEVICES
   2. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF BMPS.

NORTH

GRAPHIC SCALE IN FEET
0 40 80 160

No.	REVISIONS	DATE	BY
1	ADDENDUM 1	06/01/2020	BPG
2	ADDENDUM 2	06/05/2020	BPG

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PATRICIA D. SIGH
MN LIC. NO. 49846
DATE: 4/30/2020

KHA PROJECT	
160167000	
DATE	06/05/2020
SCALE	AS SHOWN
DESIGNED BY	BPG
DRAWN BY	BPG
CHECKED BY	TDS

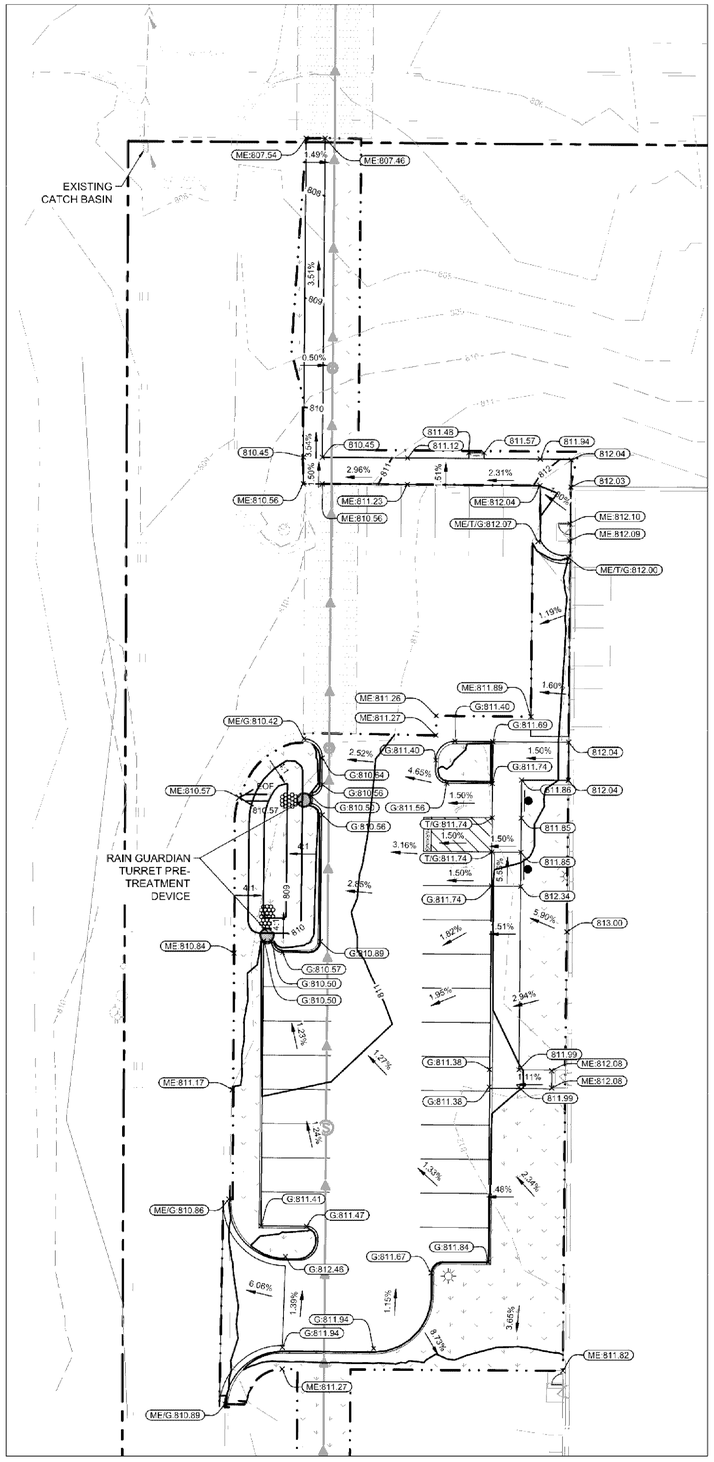
ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

OVERALL GRADING & DRAINAGE PLAN

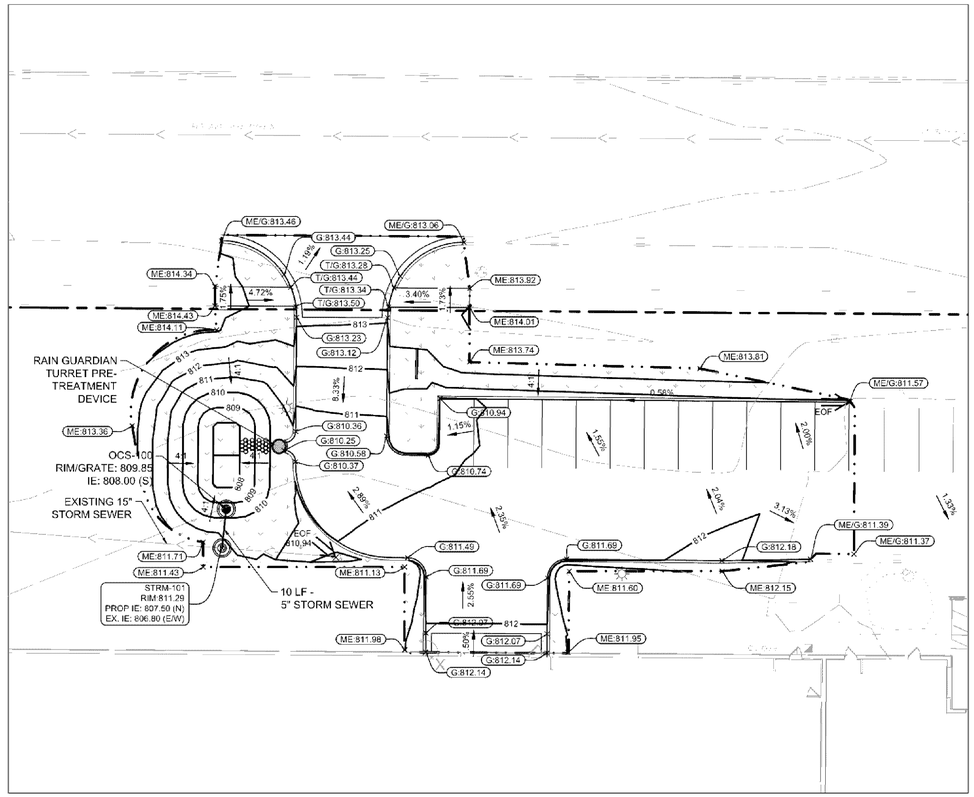
BEST BUY
DISTRIBUTION CENTER
PREPARED FOR
REPRISE DESIGN
BLOOMINGTON MN

SHEET NUMBER
C500

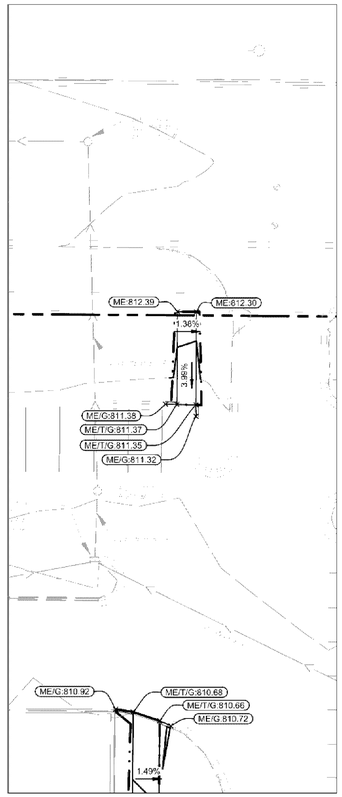
K:\TWC_LDEV\Reprise\Best Buy - Bloomington, MN\3 Design\CAD\PlanSheets\C5-GRADING PLAN.dwg June 09, 2020 - 12:03pm



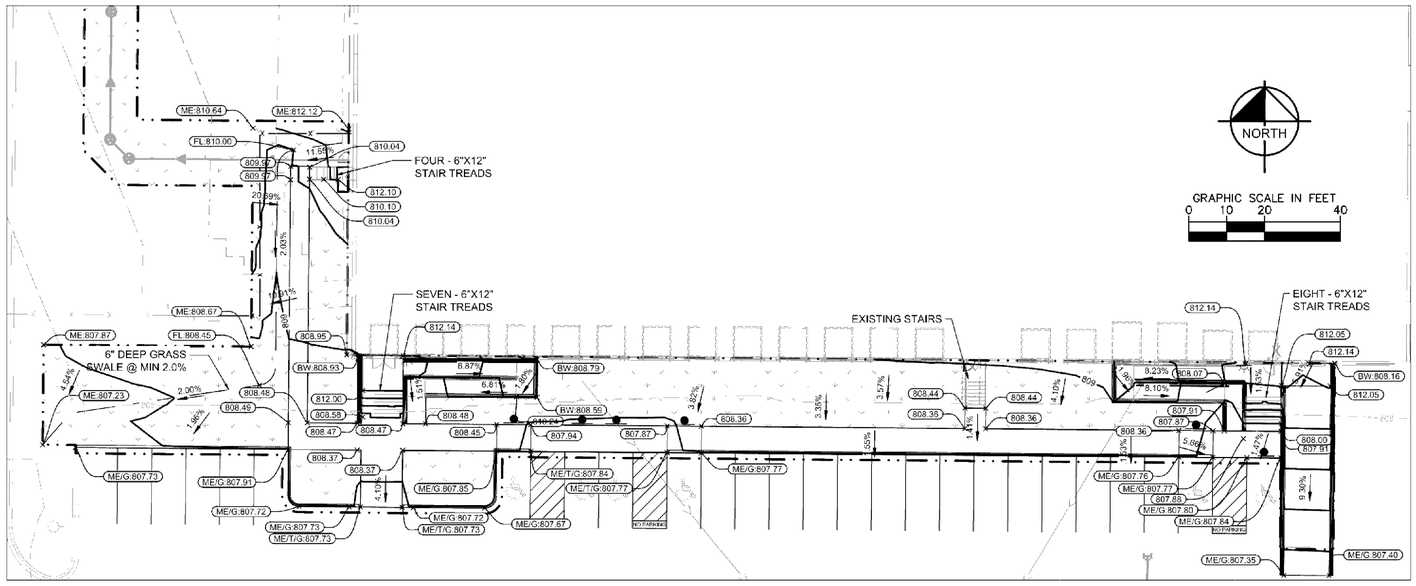
1 **WEST PARKING LOT (ALTERNATE)**
1:20



2 **NORTH PARKING LOT (ALTERNATE)**
1:20



3 **NE SIDEWALK CONNECTION**
1:20



4 **SOUTH BUILDING ACCESS**
1:20

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2	ADDENDUM 2	06/05/2020	BPG
1	ADDENDUM 1	06/01/2020	BPG

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DESIGN

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Patricia Sieh
PATRICIA D. SIEH
DATE: 4/30/2020 MN LIC. NO. 49848

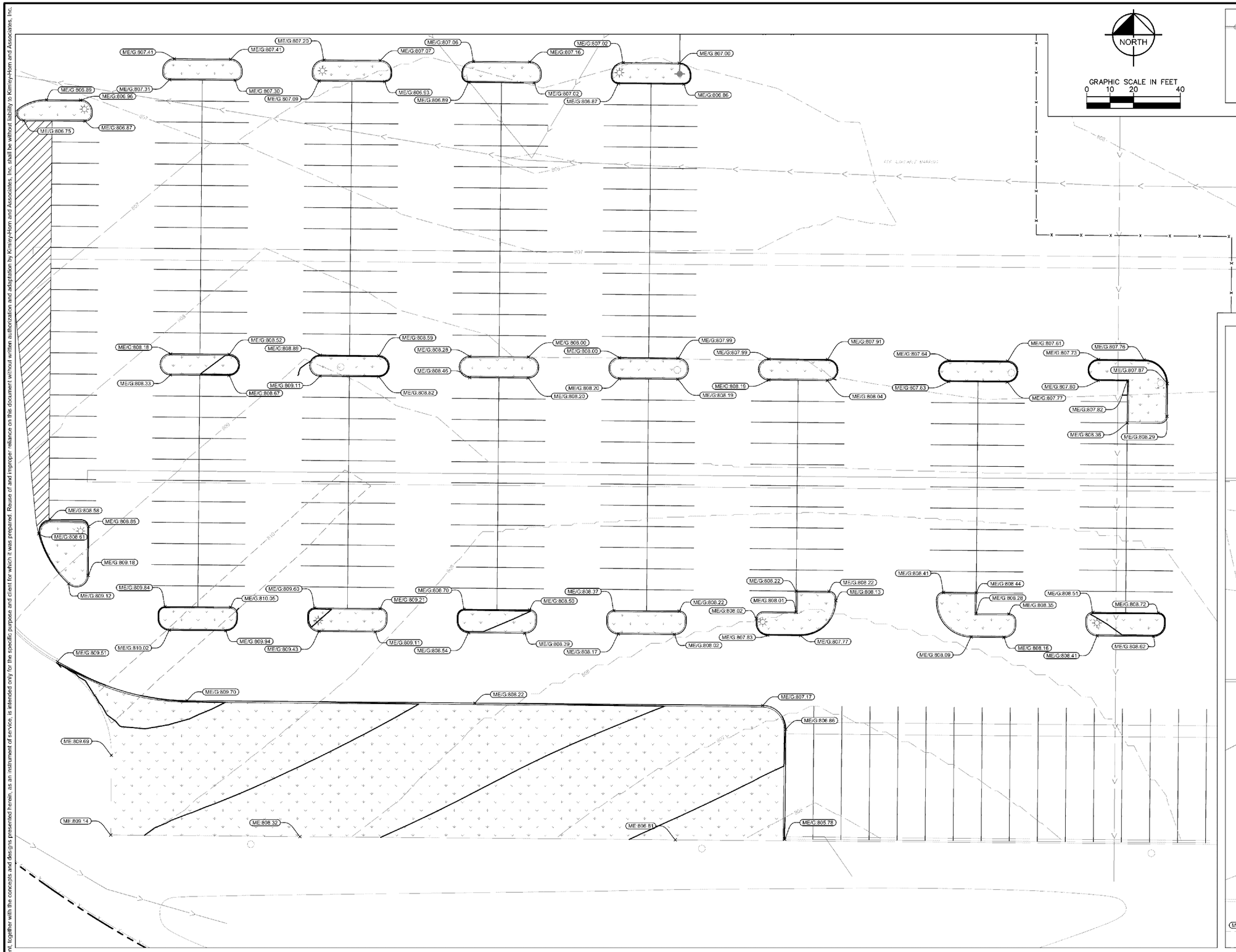
KHA PROJECT
160167000
DATE
06/05/2020
SCALE AS SHOWN
DESIGNED BY BPG
DRAWN BY BPG
CHECKED BY TDS

ENLARGED GRADING & DRAINAGE PLAN

BEST BUY DISTRIBUTION CENTER
PREPARED FOR
REPRISE DESIGN
BLOOMINGTON MN

SHEET NUMBER
C501

K:\TWC_LDEV\Reprise\Best Buy - Bloomington, MN\3 Design\CAD\PlanSheets\C5-GRADING PLAN.dwg June 09, 2020 - 12:04pm



5 **SOUTH PARKING LOT**
1:20

6 **EAST ADA ACCESS**
1:20

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1	ADDENDUM 1	06/01/2020	BFG

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PATRICIA D. SIEH
MN LIC. NO. 49846
DATE: 4/30/2020

KHA PROJECT	160167000
DATE	06/05/2020
SCALE	AS SHOWN
DESIGNED BY	BPG
DRAWN BY	BPG
CHECKED BY	TDS

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PREPARED FOR
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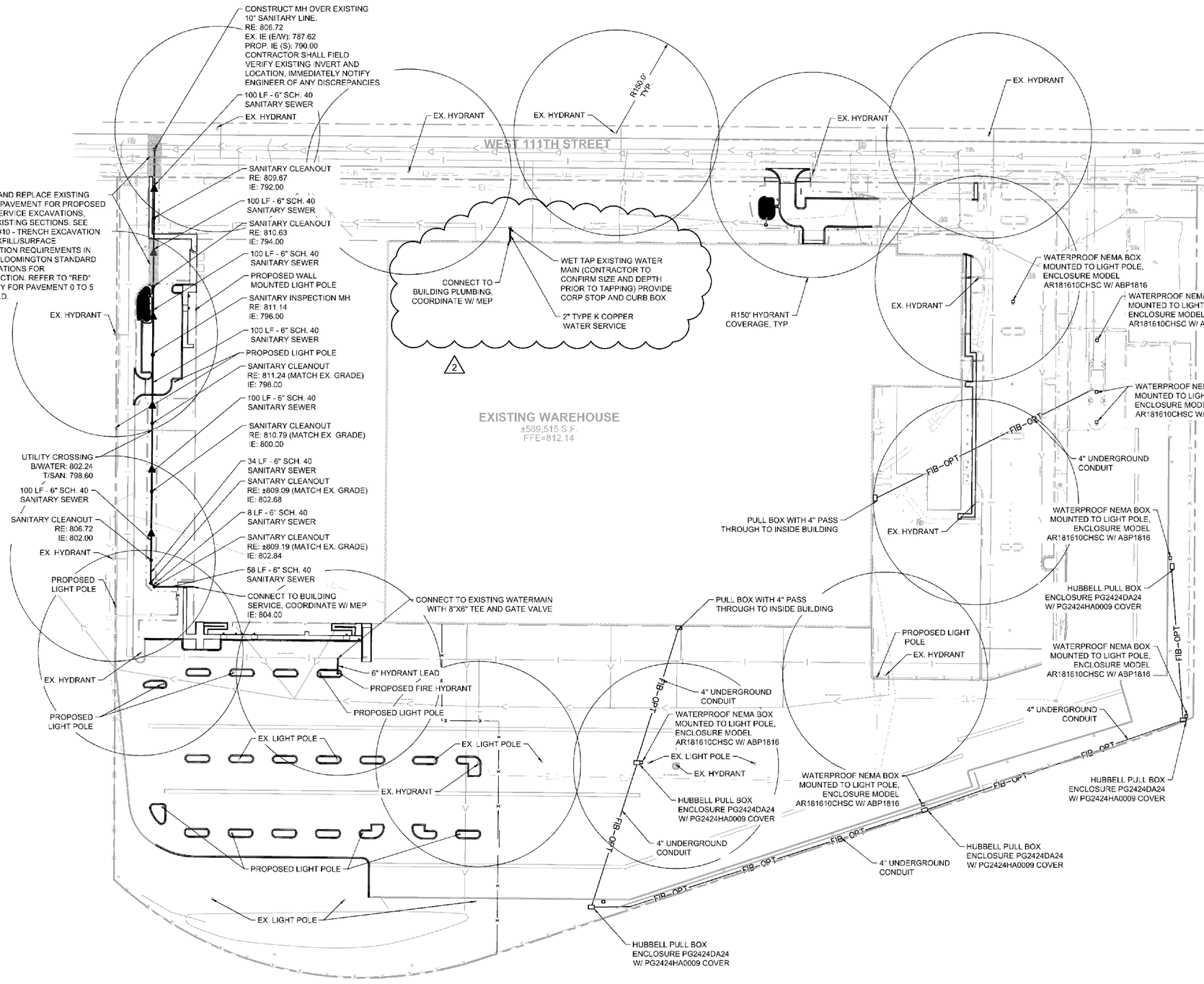
BLOOMINGTON MN

ENLARGED GRADING & DRAINAGE PLAN

SHEET NUMBER
C502



LEGEND

EXISTING	PROPOSED	
		GATE VALVE
		HYDRANT
		REDUCER
		TEE
		SANITARY SEWER MANHOLE
		SANITARY CLEANOUT
		WATERMAIN
		SANITARY SEWER
		STORM SEWER
		STORM SEWER
	ELC	UNDERGROUND ELECTRIC
	COM	TELEPHONE
	GAS	GAS MAIN
		PROPOSED SITE LIGHTING, SEE LIGHTING PLAN FOR DETAILS, CALL WLS AT (817) 840-9333 FOR PRICING

UTILITY PLAN NOTES

1. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
   8" PVC SDR35 PER ASTM D-3034, FOR PIPES LESS THAN 12' DEEP
   8" PVC SDR26 PER ASTM D-3034, FOR PIPES MORE THAN 12' DEEP
   6" PVC SCHEDULE 40 PER ASTM D-3034
   DUCTILE IRON PIPE PER AWWA C150
3. WATER LINES SHALL BE AS FOLLOWS:
   6" AND LARGER, PVC C-900 PER ASTM D 2241
   CLASS 200 UNDER COUNTY ROADS, OTHERWISE CLASS 150
   4" AND LARGER DUCTILE IRON PIPE PER AWWA C150
   SMALLER THAN 3" PIPING SHALL BE COPPER TUBE TYPE "K" PER ANSI 816.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241.
4. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
5. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH RESTRAINTS SUCH AS THRUST BLOCKING, WITH STAINLESS STEEL OR COBALT BLUE BOLTS, OR AS INDICATED IN THE CITY SPECIFICATIONS AND PROJECT DOCUMENTS.
6. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE OR STRUCTURE).
7. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 8'-0" AND MAXIMUM OF 10'-0" COVER ON ALL WATERLINES.
8. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES, OR ANY OBSTRUCTION (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE SCH. 40 OR C900 WITH MECHANICAL JOINTS AT LEAST 10 FEET ON EITHER SIDE OF THE CENTER LINE OF THE CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE FASTENERS AS REQUIRED TO PROVIDE A MINIMUM OF 18" VERTICAL SEPARATION. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
9. UTILITY AND MECHANICAL CONTRACTORS MUST COORDINATE THE INSTALLATION OF ALL WATER AND SEWER SERVICE PIPE INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION AND TESTING. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
10. TOPS OF MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS.
11. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
12. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
13. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
14. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE CITY OF BLOOMINGTON AND/OR STATE OF MN WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
15. 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 ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
16. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES.
17. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
18. CONTRACTOR SHALL REFERENCE ARCH / MEP PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN.
19. BACKFLOW DEVICES (DDCV AND PRZ ASSEMBLIES) AND METERS ARE LOCATED IN THE INTERIOR OF THE BUILDING. REF. ARCH / MEP PLANS.
20. ALL ONSITE WATERMAINS AND SANITARY SEWERS SHALL BE PRIVATELY OWNED AND MAINTAINED.
21. ALL WATERMAIN STUBOUTS SHALL BE MECHANICALLY RESTRAINED WITH REACTION BLOCKING.
22. CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT FOR UNDERGROUND WORK WITHIN THE RIGHT-OF-WAY. UTILITY PERMITS ARE REQUIRED FOR CONNECTIONS TO THE PUBLIC STORM, SANITARY, AND WATER SYSTEM. PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION. CONTACT UTILITIES (952-563-4568) FOR PERMIT INFORMATION.
23. CONTRACTOR SHALL PROVIDE ELECTRONIC UTILITY AS-BUILTS TO THE PUBLIC WORKS DEPARTMENT PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.

NORTH

GRAPHIC SCALE IN FEET
0 40 80 160

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No.	REVISIONS	DATE	BY
2	ADDENDUM 2	06/05/2020	BPG
1	ADDENDUM 1	06/01/2020	BPG

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PATRICIA D. SIGH
MN LIC. NO. 49846
DATE: 4/30/2020

KHA PROJECT 162167000
DATE 06/05/2020
SCALE AS SHOWN
DESIGNED BY BPG
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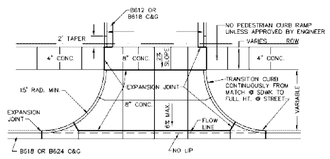
PREPARED FOR
REPRISE DESIGN
BLOOMINGTON MN

UTILITY PLAN

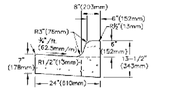
SHEET NUMBER
C600

NOTE:
- EACH DRIVEWAY PANEL NOT TO EXCEED 100 SF.
- REINFORCEMENT BARS OR WELDED WIRE FABRIC (STEEL MESH) ARE NOT ALLOWED IN THE RIGHT-OF-WAY.
- CLASS 5 AGGREGATE BASE REQUIRED UNDER CURB AND GUTTER.
- IF PRESENT, STREET LIGHT, SIGNAL AND INTERCONNECT CONDUIT OR DIRECT BURIED STREET LIGHT WIRING MUST BE EXPOSED FOR INSPECTION PRIOR TO POUR.



100 – NONRESIDENTIAL DRIVEWAY APPROACH WITH BOULEVARD SIDEWALK

CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 100 – Drwy (Commercial)
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 6/8/2015 LAST REVISED BY: KBO



105 – B618 STANDARD CURB & GUTTER

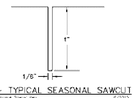
CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 105 – C&G (Bloom Std)
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 6/5/2015 LAST REVISED BY: KBO

(FOR USE WITHIN PUBLIC ROW)

120 – TYPICAL SIDEWALK INSTALLATION

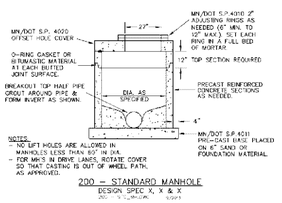
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	PLATE NAME: 120 – Typ Conc. Walk
	LAST REVISED: 9/30/2016 LAST REVISED BY: KBO

(FOR USE WITHIN PUBLIC ROW)



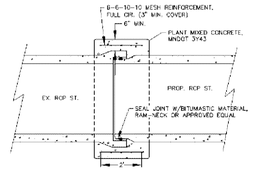
137 – TYPICAL SEASONAL SAWCUT

CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 137 – Seasonal Sawcut
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 6/8/2015 LAST REVISED BY: KBO



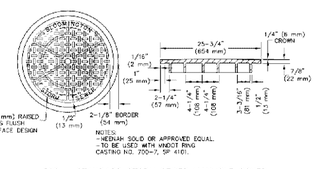
200 – STANDARD MANHOLE
DESIGN SPEC X, X & X

CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 200 – Std MH
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 9/13/2016 LAST REVISED BY: KBO



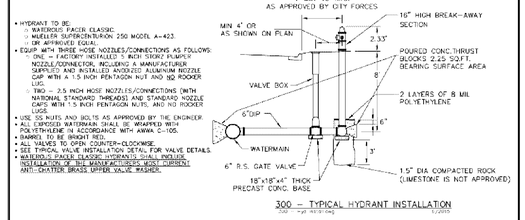
212 – STD CONST. JOINT

CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 212 – Std Const. Joint
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 9/14/2016 LAST REVISED BY: KBO



500 – STANDARD STORM SEWER MANHOLE COVER

ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	PLATE NAME: 500 – Storm Cov (Solid)
	LAST REVISED: 5/15/2015 LAST REVISED BY: KBO



300 – TYPICAL HYDRANT INSTALLATION

CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 300 – Hyd Install
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 6/15/2015 LAST REVISED BY: KBO

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	ADDENDUM 1	06/01/2020	BPG
2	ADDENDUM 2	06/05/2020	BPG

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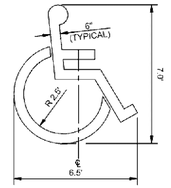
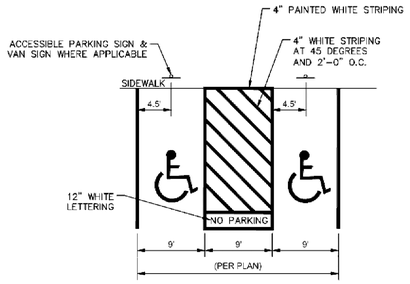
KHA PROJECT	160167000
DATE	06/05/2020
SCALE	AS SHOWN
DESIGNED BY	BPG
DRAWN BY	BPG
CHECKED BY	TDS

CIVIL DETAILS

BEST BUY DISTRIBUTION CENTER
PREPARED FOR
REPRISE DESIGN
BLOOMINGTON MN

SHEET NUMBER
C700

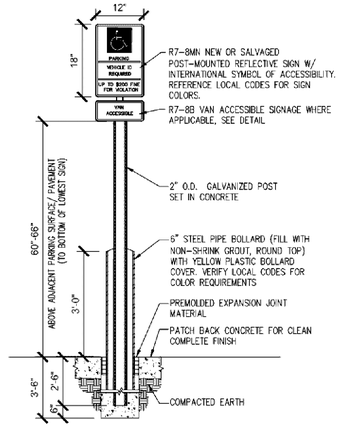




NOTE: REFER TO PLAN FOR DETAILED LAYOUT AND DIMENSIONS

1 TYPICAL ADA STRIPING
SCALE: NTS

NOTES:
- CONTRACTOR TO VERIFY ALL EXISTING SIGNAGE TO COMPLY WITH THE LOCAL BUILDING CODE. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO EXISTING SIGNAGE AS REQUIRED BY LOCAL AUTHORITIES.
- SIGNS SHALL BE CENTERED AT THE END OF EACH STALL UNLESS OTHERWISE NOTED.



2 ACCESSIBLE SIGN BOLLARD
SCALE: NTS

R7-8b
VAN ACCESSIBLE

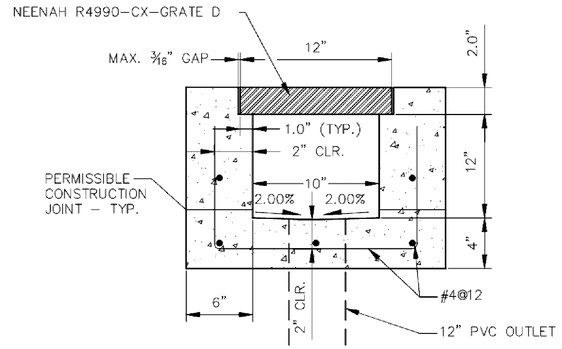
	A	B	C	E	F	G	H	J	K	L
	12	6	.375	4.88	1.5	11.5	3	1.5"	3.924	1.5
C	18	9	.375	4.88	2.25	3.0	1	1.5"	5.886	1.5

PARKING APPLICATION — DIRECTIONAL APPLICATION

COLORS: LEGEND – GREEN (RETROREFLECTIVE) OR BLACK; BACKGROUND – WHITE (RETROREFLECTIVE)
COLORS: LEGEND – WHITE (RETROREFLECTIVE); BACKGROUND – BLUE (RETROREFLECTIVE)

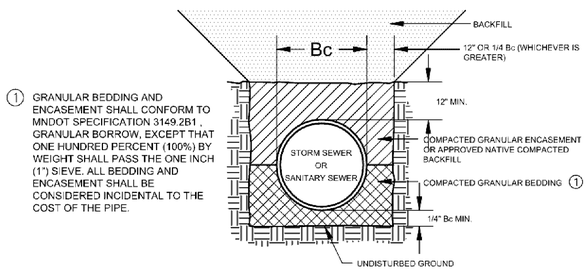
1:93

3 R7-8MN ADA PARKING SIGN
SCALE: NTS



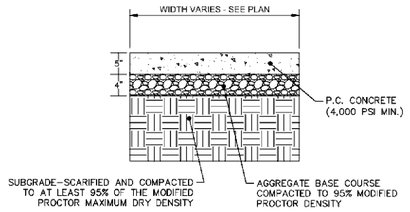
12" CONCRETE FLUME

4 FLUME DETAIL
SCALE: NTS



① GRANULAR BEDDING AND ENCASEMENT SHALL CONFORM TO MNDOT SPECIFICATION 3149.2B1 , GRANULAR BORROW, EXCEPT THAT ONE HUNDRED PERCENT (100%) BY WEIGHT SHALL PASS THE ONE INCH (1") SIEVE. ALL BEDDING AND ENCASEMENT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PIPE.

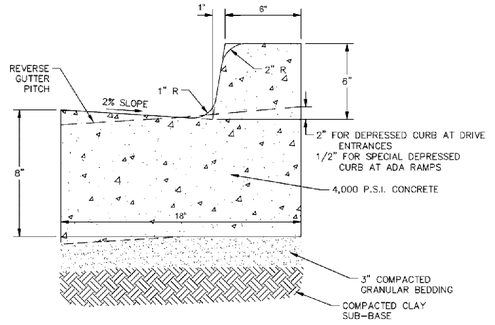
5 CLASS B PIPE BEDDING FOR SANITARY/STORM SEWER
SCALE: NTS



NOTES:
1. ALL SIDEWALK SHALL BE CONSTRUCTED WITH CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 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.
8. CONTRACTOR TO CONFIRM PAVEMENT SECTION COMPLIES WITH GEOTECHNICAL REPORT RECOMMENDATIONS.

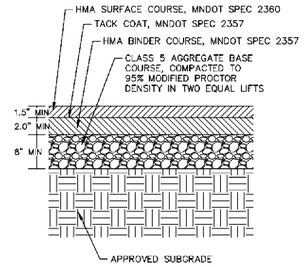
6 CONCRETE SIDEWALK
SCALE: NTS

(FOR USE ONSITE)



7 B612 CURB & GUTTER
SCALE: NTS

(FOR USE ONSITE)



NOTE:
1. CONTRACTOR SHALL MATCH EXISTING PAVEMENT SECTIO. DEPTHS SHOWN ARE MINIMUMS.
2. VERIFY ADEQUACY OF PAVEMENT SECTION WITH ENGINEER AFTER SUBGRADE SOILS ARE EXPOSED AND BEFORE BITUMINOUS PAVEMENT IS PLACED.

8 STANDARD DUTY ASPHALT PAVEMENT SECTION
SCALE: NTS

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
2	ADDENDUM 2	06/05/2020	BPG
1	ADDENDUM 1	06/01/2020	BPG

Kimley»Horn
2020 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100
ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

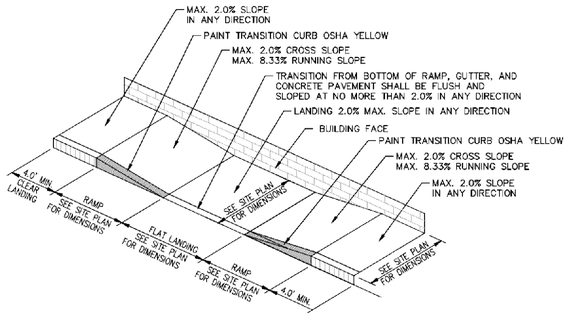
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PATRICIA D. SIGH
DATE: 4/30/2020
MN LIC. NO. 49846

KHA PROJECT	160167000
DATE	06/05/2020
SCALE	AS SHOWN
DESIGNED BY	BPG
DRAWN BY	BPG
CHECKED BY	TDS

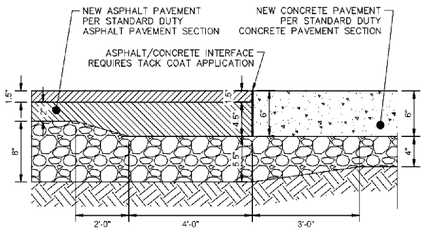
BEST BUY DISTRIBUTION CENTER
PREPARED FOR
REPRISE DESIGN
BLOOMINGTON MN

CIVIL DETAILS

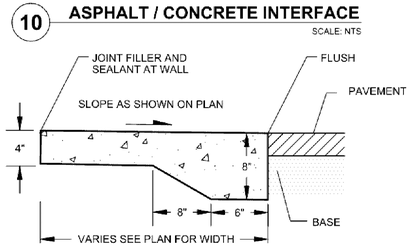
SHEET NUMBER
C701



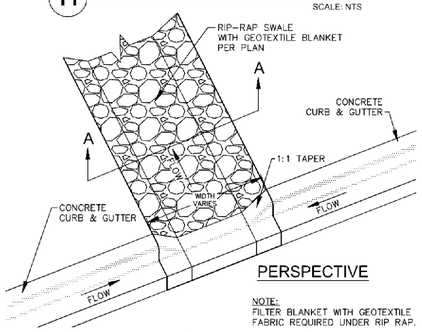
9 VIEW TITLE
SCALE 1"=10'



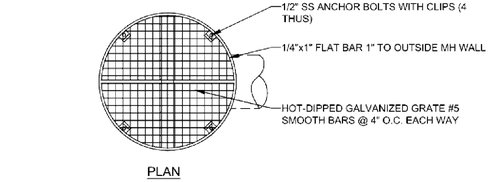
10 ASPHALT / CONCRETE INTERFACE
SCALE: NTS



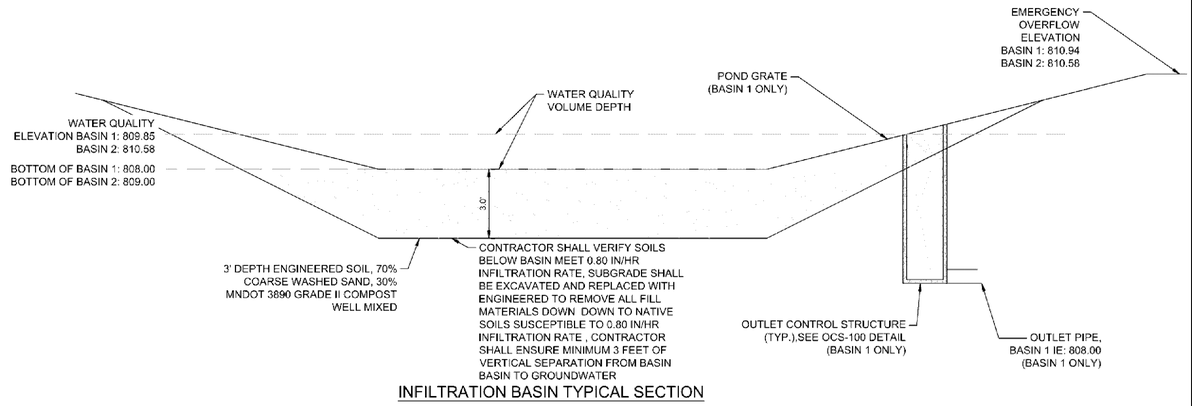
11 FLUSH CONCRETE CURB
SCALE: NTS



12 CURB CUT W. RIPRAP SWALE
SCALE: NTS

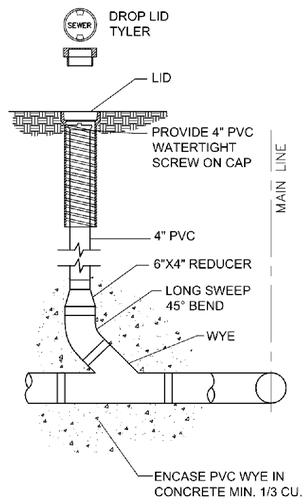


INFILTRATION BASIN OUTLET CONTROL STRUCTURE OCS-100 (BASIN 1 ONLY)



INFILTRATION BASIN TYPICAL SECTION

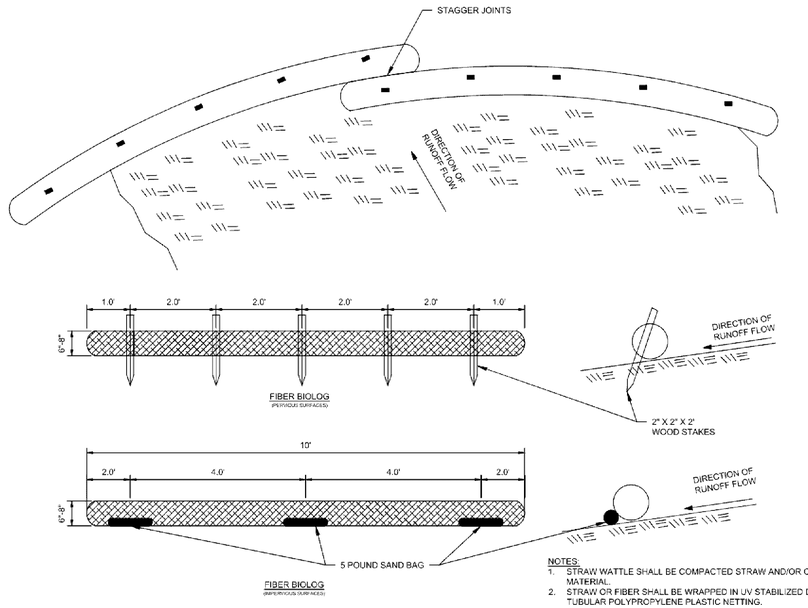
14 INFILTRATION BASIN/ OCS-100 DETAIL
SCALE: NTS



NOTES:
G.V. BOX TOP SECTION (SEWER)

ENCLOSE LONG SWEEP BEND OR COMBINATION WYE IN CONCRETE AS SHOWN.

13 SANITARY SEWER CLEANOUT
SCALE: NTS



NOTES:
1. STRAW WATTLE SHALL BE COMPACTED STRAW AND/OR ORGANIC FIBER MATERIAL.
2. STRAW OR FIBER SHALL BE WRAPPED IN UV STABILIZED DEGRADABLE TUBULAR POLYPROPYLENE PLASTIC NETTING.

15 FIBER BIOLOG DETAIL
SCALE: NTS

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

No.	REVISIONS	DATE	BY
1	ADDENDUM 1	06/01/2020	BPG
2	ADDENDUM 2	06/05/2020	BPG

Kimley»Horn
2020 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100
ST. PAUL, MN 55114
PHONE: 651-645-4197
WWW.KIMLEY-HORN.COM

reprise DESIGN

BEST BUY

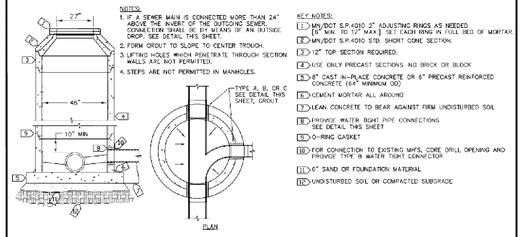
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PATRICIA D. SIEH
MN LIC. NO. 49848
DATE: 4/30/2020

KHA PROJECT 160167000
DATE 06/05/2020
SCALE AS SHOWN
DESIGNED BY BPG
DRAWN BY BPG
CHECKED BY TDS

BEST BUY DISTRIBUTION CENTER
PREPARED FOR
REPRISE DESIGN
BLOOMINGTON MN

CIVIL DETAILS

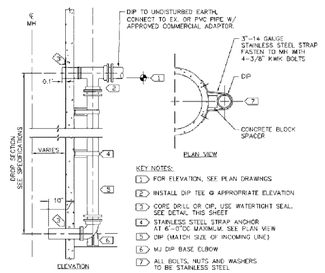
SHEET NUMBER
C702



400 – STD. SANITARY SEWER MH

M:\Cad Comm\Details Updated\0 – SAN SEWER\400 – Std San MH

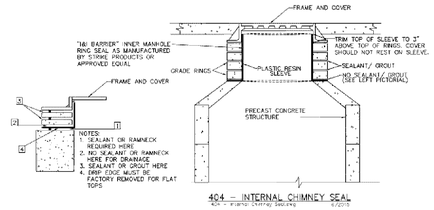
CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 400 – Std San MH
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 6/15/2015
	LAST REVISED BY: KBG



402 – OUTSIDE DROP SECTION

M:\Cad Comm\Details Updated\0 – 400 – SAN SEWER complete\402 – Outside Drop

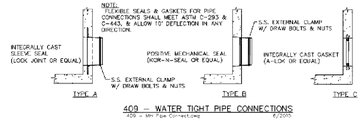
CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 402 – Outside Drop
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 9/13/2016
	LAST REVISED BY: KBG



404 – INTERNAL CHIMNEY SEAL

M:\Cad Comm\Details Updated\0 – SAN SEWER\404 – Internal Chimney Seal

CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 404 – Internal Chimney Seal
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 6/16/2015
	LAST REVISED BY: KBG

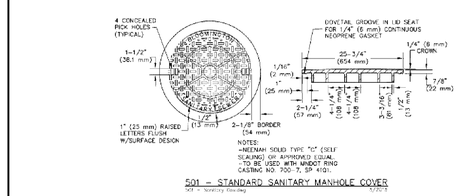


409 – WATER TIGHT PIPE CONNECTIONS

409 – MH Pipe Connections 6/2015

M:\Cad Comm\Details Updated\0 – SAN SEWER\409 – MH Pipe Connect

CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 409 – MH Pipe Connect
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 6/15/2015
	LAST REVISED BY: KBG

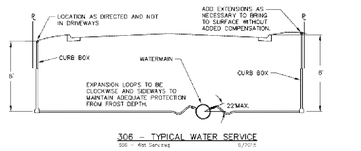


501 – STANDARD SANITARY MANHOLE COVER

501 – Sanitary Covers 6/2015

M:\Cad Comm\Details Updated\0 – CASTINGS\501 – Sanitary Cov

CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 501 – Sanitary Cov
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 5/15/2015
	LAST REVISED BY: KBG



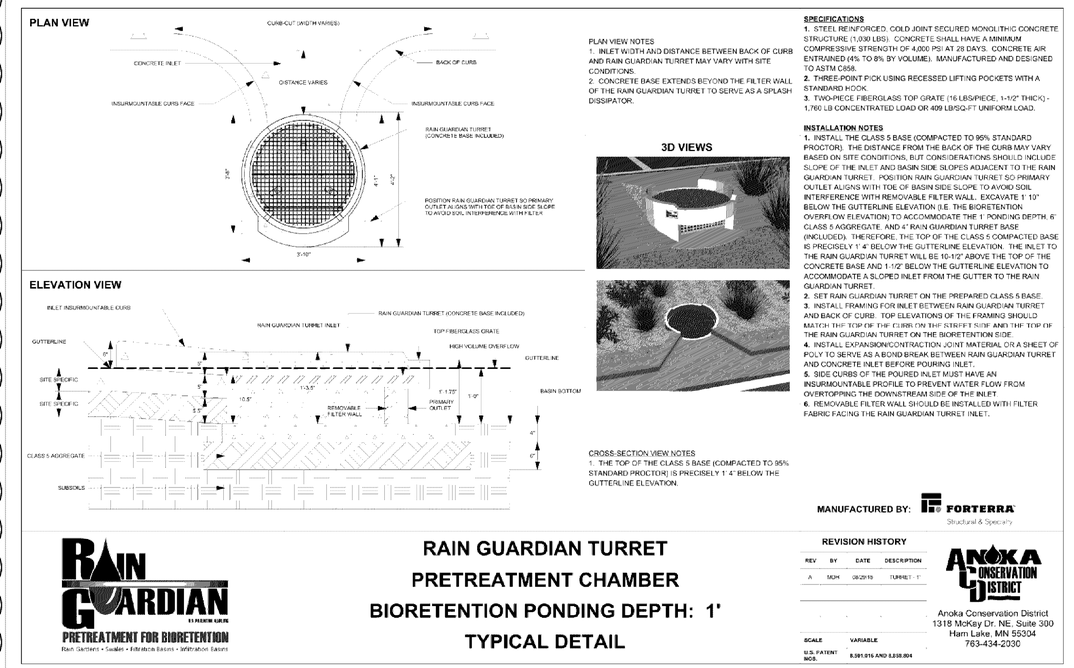
306 – TYPICAL WATER SERVICE

306 – Wat Services 6/2015

M:\Cad Comm\Details Updated\0 – 300 – WATER\306 – Wat Serv

CITY OF BLOOMINGTON MINNESOTA	PLATE NAME: 306 – Wat Serv
ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT	LAST REVISED: 6/15/2015
	LAST REVISED BY: KBG

2



No.	REVISIONS	DATE	BY
1	ADDENDUM 1	06/05/2020	BPG
2	ADDENDUM 2	06/07/2020	BPG

Kimley»Horn
2020 KIMLEY-HORN AND ASSOCIATES, INC.
767 EUSTIS STREET, SUITE 100
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BEST BUY

FOR REFERENCE ONLY

KHA PROJECT 160167000

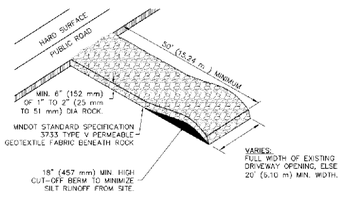
DATE	06/05/2020
SCALE	AS SHOWN
DESIGNED BY	BPG
DRAWN BY	BPG
CHECKED BY	TDS

CIVIL DETAILS

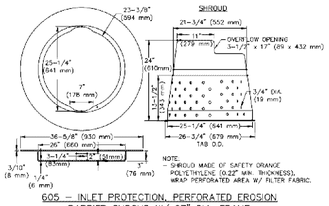
BEST BUY DISTRIBUTION CENTER
PREPARED FOR
REPRISE DESIGN
BLOOMINGTON MN

ISSUED FOR PERMIT - NOT FOR CONSTRUCTION

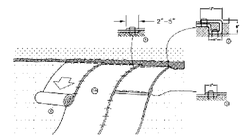
SHEET NUMBER C703



600 – ROCK CONSTRUCTION ENTRANCE AT ACCESS ROADS



605 – INLET PROTECTION, PERFORATED EROSION BARRIER SHROUD W/ 27" DIA. FRAME



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING SEED-OF-SOD DO NOT SEED PREPARED AREA. SEED-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (150mm) DEEP X 6" (150mm) WIDE TRENCH. APPROXIMATELY 12" (300mm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM - STAPLES/STAKES SHOULD BE PLACED TWO (2) FEET APART ACROSS THE WIDTH OF THE BLANKET AND FOUR (4) FEET APART DOWN THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"–5" (5cm–13 5cm) OVERLAP DEPENDENT ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STRIP ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.
6. FOLLOW MANUFACTURER'S RECOMMENDED STAPLE PATTERN FOR THE SLOPE FOR THE SPECIFIED BLANKET.

NOTE:
IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

611 – STANDARD STAPLE PATTERN

CITY OF BLOOMINGTON MINNESOTA
1700 W 98TH ST
BLOOMINGTON MN 55431
PHONE (952) 563-8700

ENGINEERING DIVISION
PUBLIC WORKS DEPARTMENT

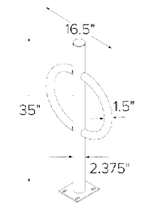
PLATE NAME:	
600 – Rock Const. Ent	
LAST REVISED: 5/15/2015	
LAST REVISED BY: KBO	

PLATE NAME:	
605 – Inlet Shroud (ROUND)	
LAST REVISED: 5/15/2015	
LAST REVISED BY: KBO	

PLATE NAME:	
611 – Std Staple Pattern	
LAST REVISED: 5/15/2015	
LAST REVISED BY: KBO	

BIKE HITCH

Submittal Sheet



CAPACITY 2 Bikes

MATERIALS **Centerbeam:** 2" schedule 40 pipe (2.375" OD)
Ring: 1.5" OD 11 gauge tube

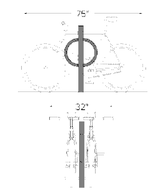
FINISHES

☐ **Galvanized**
An after fabrication hot dipped galvanized finish is our standard option.

Powder Coat
Our powder coat finish assures a high level of adhesion and durability by following these steps:
1. Sandblast
2. Epoxy primer electrostatically applied
3. Final thick TGIC polyester powder coat

☒ **PVC Dip**
Black PVC

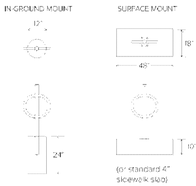
☐ **Stainless**
Stainless Steel: 304 grade stainless steel material finished in either a high polished shine or a satin finish.



MOUNT OPTIONS

☐ **In-ground**
In ground mount is embedded into concrete base. Specify in ground mount for this option.

☒ **Surface**
Foot Mount has a 5"x8"x.25" foot with four anchors per foot. Specify foot mount for this option.



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No.	DATE	BY
REVISIONS		
1 ADDENDUM 1	06/01/2020	BPG
2 ADDENDUM 2	06/05/2020	BPG

Kimley»Horn
2020 KIMLEY-HORN AND ASSOCIATES, INC.
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reprise DESIGN

BEST BUY

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BEST BUY DISTRIBUTION CENTER
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REPRISE DESIGN
BLOOMINGTON MN

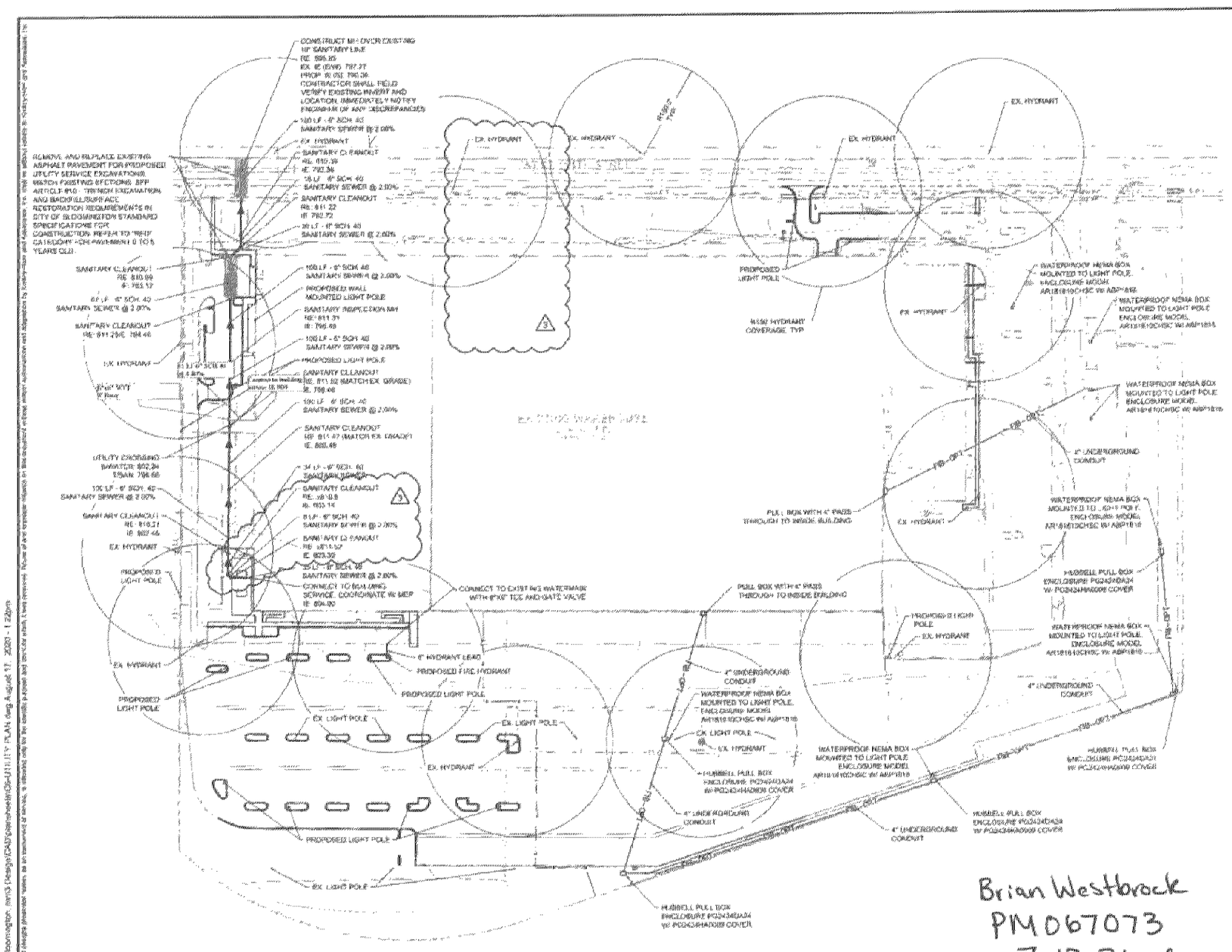
CIVIL DETAILS

KHA PROJECT	162167000
DATE	06/05/2020
SCALE	AS SHOWN
DESIGNED BY	BPG
DRAWN BY	BPG
CHECKED BY	TDS

SHEET NUMBER
C705

6203 W 111th St

Best Buy Warehouse 2021 sewer service added.



Brian Westbrock
PM067073
7-13-21
Brian W


6203 W 111th St
Best Buy warehouse - 2021 sewer alteration
Existing 6" Sch 40 Sanitary Sewer Service @ 2.0%
Proposed 35' 6" SCH 40 Sanitary Sewer Service @ 4.4%
6"x6" WYE
IE 798.40
4' Riser
IE 802.40
Connect to building service IE 804
Existing 6" Sch 40 Sanitary Service @2.0%
Google Earth
40 m
Camera: 634 m 44°48'03" N 93°21'53" W 259 m