

PRELIMINARY PLANS

SOUTHVIEW HEIGHTS

ST. JOSEPH, MN

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
140 75TH STREET NE
RICE, MN 56367
CONTACT: KEVIN JOHNSON
PHONE: 320-248-5245
EMAIL: KEVIN@KJOHNSONCONST.COM

SHEET INDEX

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	SITE PLAN
4	PHASING PLAN
5	GRADING & DRAINAGE PLAN
6	EROSION CONTROL PLAN
7	SAINTARY SEWER AND WATERMAIN PLAN
8	STORM SEWER PLAN
9	DETAILS
10	LANDSCAPE PLAN
11	LANDSCAPE DETAILS

BENCHMARKS

- BM-1**
APPROXIMATELY 40' EAST OF THE SOUTH END OF 20TH AVENUE SE
TOP-NUT-HYDRANT
ELEV.=1076.14
- BM-2**
NW QUADRANT OF E BAKER STREET AND 17TH AVENUE SE
TOP-NUT-HYDRANT
ELEV.=1093.81



Vicinity Map
(NOT TO SCALE)

NOT FOR CONSTRUCTION

N:\0012336.00\DWG\CTV\0012336.00TTL.DWG

SOUTHVIEW HEIGHTS

DESIGNED:	WRH
CHECKED:	WRH
DRAWN:	JJN
FIELD CREW:	
FIELD WORK DATE:	

INITIAL ISSUE:	02/13/18
REVISIONS:	04/02/18 - REVISED PER CITY COMMENTS

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
140 75TH STREET NE
RICE, MN 56367

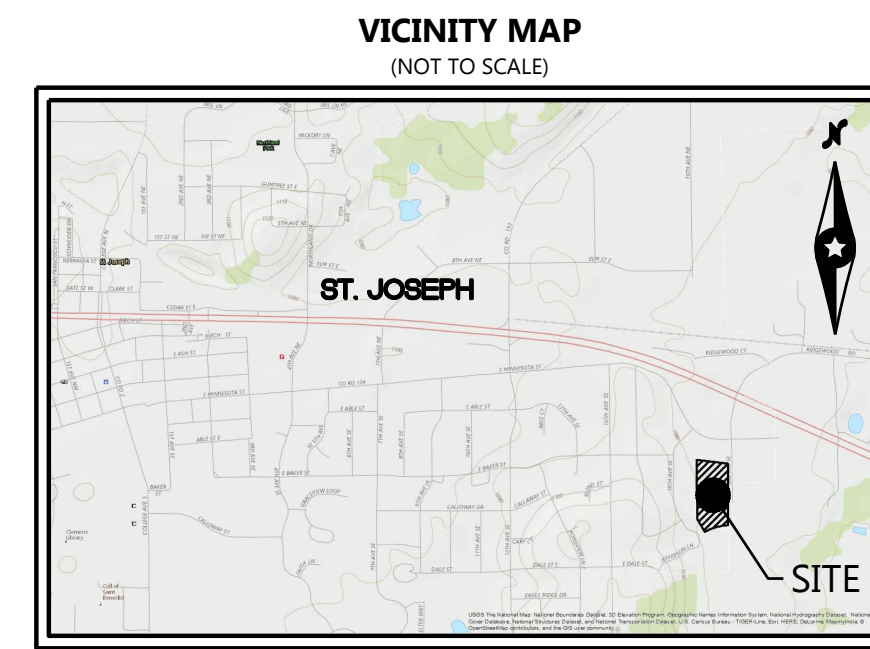
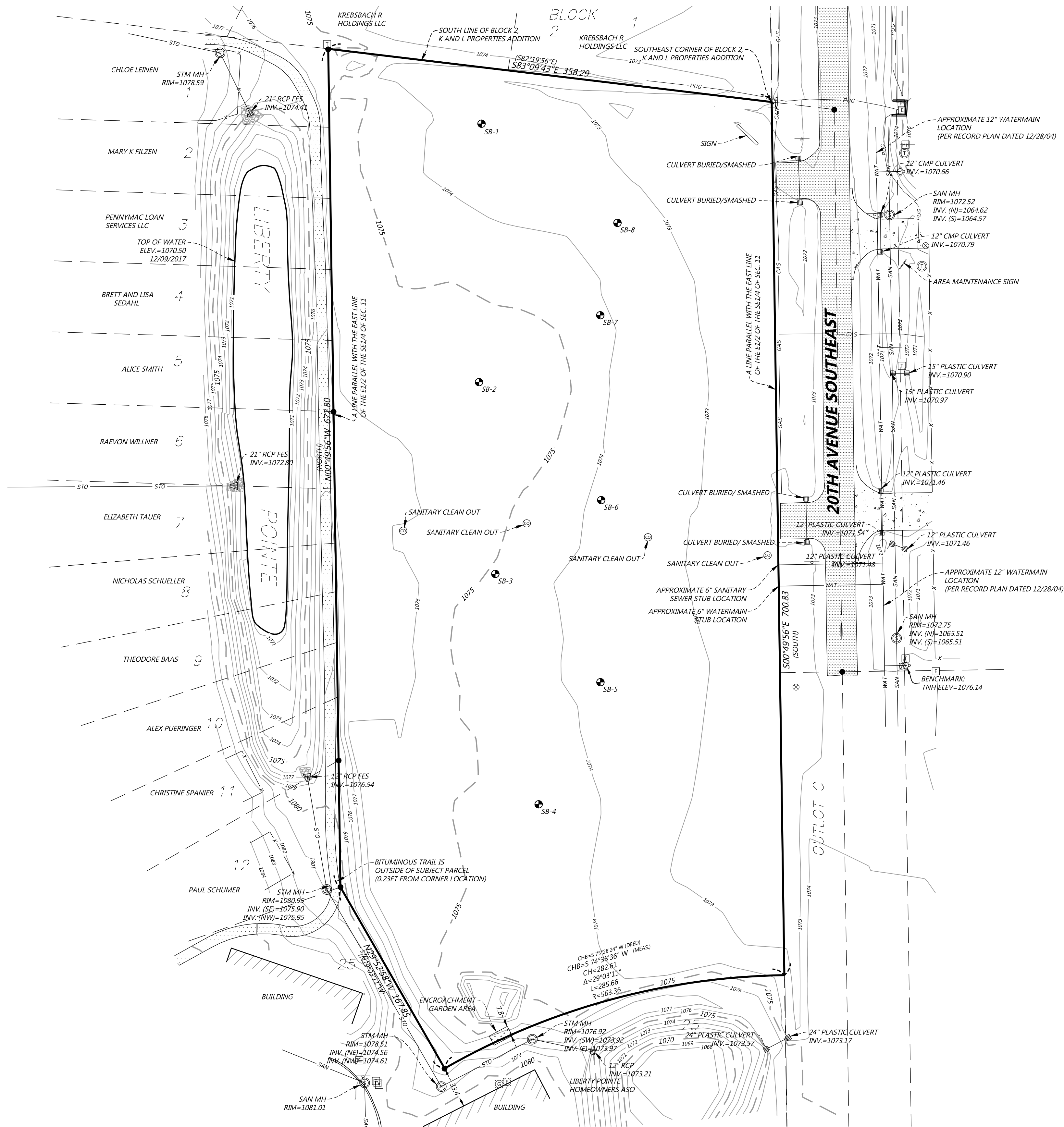
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
WILLIAM R. HUSTON
DATE: 04/02/18 LICENSE NO. 44984

SOUTHVIEW HEIGHTS
ST. JOSEPH, MN

Westwood
Phone (320) 253-9495 3701 12th Street North, Suite 206
Fax (320) 358-2001 St. Cloud, MN 56303
Toll Free (800) 270-9495 westwoodps.com
Westwood Professional Services, Inc.

COVER SHEET

SHEET NUMBER:
1 OF **11**
DATE: 04/02/18

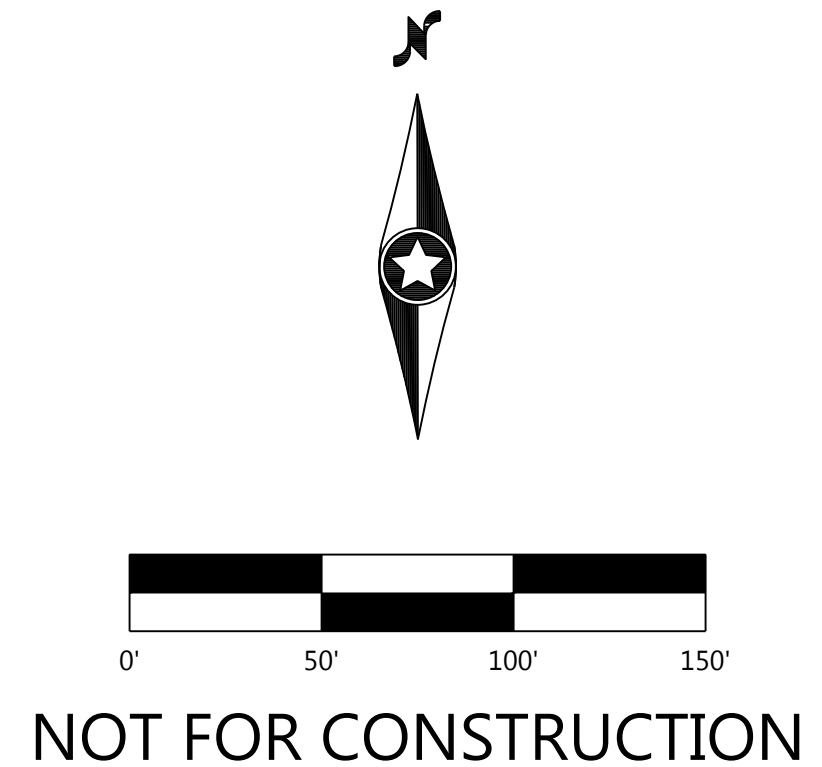


EXISTING CONDITIONS LEGEND

	BUSH/SHRUB		STORM MANHOLE
	CONIFEROUS TREE		TELEPHONE BOX
	DECIDUOUS TREE		TELEPHONE MANHOLE
	WETLAND		TRAFFIC CONTROL BOX
	STEEL/WOOD POST		HAND HOLE
	SIGN-TRAFFIC/OTHER		TRAFFIC LIGHT
	SIGN-TRAFFIC/OTHER		GATE VALVE
	MAIL BOX		HYDRANT
	HANDICAPPED STALL		WATER METER
	PERC TEST		CURB STOP BOX
	MONITORING WELL		WATER MANHOLE
	CABLE TV BOX		WELL
	GAS METER		CABLE TELEVISION LINE
	STREET LITE		GAS LINE
	GUY WIRE		POWER OVERHEAD
	POWER POLE		POWER UNDERGROUND
	ELECTRIC BOX		SANITARY SEWER
	ELECTRIC METER		STORM SEWER
	ELECTRIC MANHOLE		TELEPHONE OVERHEAD
	ELECTRIC TOWER		TELEPHONE UNDERGROUND
	SANITARY MANHOLE		WATERMAIN
	SEWER CLEANOUT		FENCE LINE
	BEEHIVE CATCH BASIN		TREE STUMP
	CATCH BASIN		POST INDICATOR VALVE
	FLARED END SECTION		SOIL BORING
	TELEPHONE MANHOLE		PIEZOMETER
			FLOOD/YARD LIGHT

LEGAL DESCRIPTION

THAT PART OF THE EAST HALF OF THE SOUTHWEST QUARTER (E1/2 SW1/4) OF SECTION 11, TOWNSHIP 124, RANGE 29, STEARNS COUNTY, MINNESOTA, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE SOUTH LINE OF BLOCK 2, K AND L PROPERTIES ADDITION, A DULY RECORDED PLAT IN SAID COUNTY AND STATE, DISTANT 358.29 FEET WESTERLY OF THE SOUTHEAST CORNER OF SAID BLOCK 2; THENCE SOUTH 82°19'56" EAST FOR 358.29 FEET TO THE SOUTHEAST CORNER OF SAID BLOCK 2; THENCE SOUTH AND PARALLEL WITH THE EAST LINE OF SAID E1/2 SW1/4 FOR 700.83 FEET; THENCE WESTERLY ALONG A CURVE, CONCAVE TO THE SOUTH, HAVING A RADIUS OF 563.36 FEET; A CENTRAL ANGLE OF 29°03'11", A LENGTH OF 285.66 FEET, A CHORD OF 286.61 FEET AND A CHORD BEARING OF SOUTH 75°28'24" WEST; THENCE NORTH 29°03'11" WEST FOR 167.85 FEET TO A LINE DRAWN SOUTH, PARALLEL WITH THE EAST LINE OF SAID E1/2 SW1/4 FROM THE POINT OF BEGINNING; THENCE NORTH FOR 672.80 FEET TO THE POINT OF BEGINNING.



N:\0012336\00\DWG\CIVIL\0012336\00EX01.DWG

SOUTHVIEW HEIGHTS

DESIGNED: WRH
 CHECKED: WRH
 DRAWN: JIN
 FIELD CREW:
 FIELD WORK DATE:

INITIAL ISSUE: 02/13/18
 REVISIONS:
 04/02/18 - REVISED PER CITY COMMENTS

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
 140 75TH STREET NE
 RICE, MN 56367

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
 WILLIAM R. HUSTON
 DATE: 04/02/18 LICENSE NO. 44984

SOUTHVIEW HEIGHTS
 ST. JOSEPH, MN

Westwood

Phone (320) 253-9495 3701 12th Street North, Suite 206
 Fax (320) 358-2001 St. Cloud, MN 56303
 Toll Free (800) 270-9495 westwoodsps.com
 Westwood Professional Services, Inc.

EXISTING CONDITIONS
 PLAN

SHEET NUMBER:

2 OF **11**

DATE: 04/02/18

0012336.00

SITE LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		LOT LINE
		SETBACK LINE
		EASEMENT LINE
		CURB AND GUTTER
		TIP-OUT CURB AND GUTTER
		POND NORMAL WATER LEVEL
		RETAINING WALL
		FENCE
		CONCRETE PAVEMENT
		CONCRETE SIDEWALK
		HEAVY DUTY BITUMINOUS PAVEMENT
		NORMAL DUTY BITUMINOUS PAVEMENT
		NUMBER OF PARKING STALLS
		TRANSFORMER
		SITE LIGHTING
		TRAFFIC SIGN
		POWER POLE
		BOLLARD / POST

GENERAL SITE NOTES

- LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY.
- REFER TO BOUNDARY SURVEY FOR LOT BEARINGS, DIMENSIONS AND AREAS.
- ALL DIMENSIONS ARE TO FACE OF CURB OR EXTERIOR FACE OF BUILDING UNLESS OTHERWISE NOTED.
- ALL CURB RADII ARE SHALL BE 3.0 FEET (TO FACE OF CURB) UNLESS OTHERWISE NOTED.
- ALL CURB AND GUTTER SHALL BE MODIFIED D418 UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGGERS AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE CITY AND ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS.
- BITUMINOUS PAVEMENT AND CONCRETE SECTIONS TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
- CONTRACTOR SHALL MAINTAIN FULL ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES.

SITE DEVELOPMENT SUMMARY

EXISTING ZONING:	R-3, MULTIPLE FAMILY RESIDENTIAL
PROPERTY AREA:	263,434 SF (6.05 AC)
PERVIOUS SURFACE:	117,223 SF (43.1%)
IMPERVIOUS SURFACE (AS SHOWN)(RATIO):	146,211 SF (55.5%)
MAXIMUM IMPERVIOUS RATIO:	55.5%
DENSITY:	11-BUILDINGS, 22-UNITS 4-BUILDINGS, 8-UNITS 8-PLEX TOTAL
BUILDING SETBACK FROM LOT LINE PER R-3 CODE:	35'=FRONT 20'=SIDE / 30'=SIDE TO ROW 50' SIDE TO RESIDENTIAL 40'=REAR / 50' REAR TO RESIDENTIAL 70'=POND NWL
BUILDING SETBACK FROM LOT LINE PROPOSED:	35'=FRONT 20'=SIDE / 30'=SIDE TO ROW 30' SIDE TO RESIDENTIAL 30'=REAR / 30' REAR TO RESIDENTIAL 50'=POND HWL
BUILDING SETBACKS INSIDE LOT LINES:	10' BUILDING TO BUILDING 25' BUILDING TO INTERNAL DRIVE
PHASING SETBACK:	0' FROM INTERNAL LOT LINE
PARKING SETBACK:	10'
DRIVE AISLE:	26' F-F



NOT FOR CONSTRUCTION

DESIGNED: WRH
 CHECKED: WRH
 DRAWN: JIN
 FIELD CREW:
 FIELD WORK DATE:

INITIAL ISSUE: 02/13/18
 REVISIONS:
 04/02/18 - REVISED PER CITY COMMENTS

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
 140 75TH STREET NE
 RICE, MN 56367

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
WILLIAM R. HUSTON
 DATE: 04/02/18 LICENSE NO. 44984

SOUTHVIEW HEIGHTS
 ST. JOSEPH, MN

Westwood

Phone (320) 253-9495 3701 12th Street North, Suite 206
 Fax (320) 358-2001 St. Cloud, MN 56303
 Toll Free (800) 270-9495 westwoodsps.com
 Westwood Professional Services, Inc.

SITE PLAN

SHEET NUMBER:

3 OF **11**

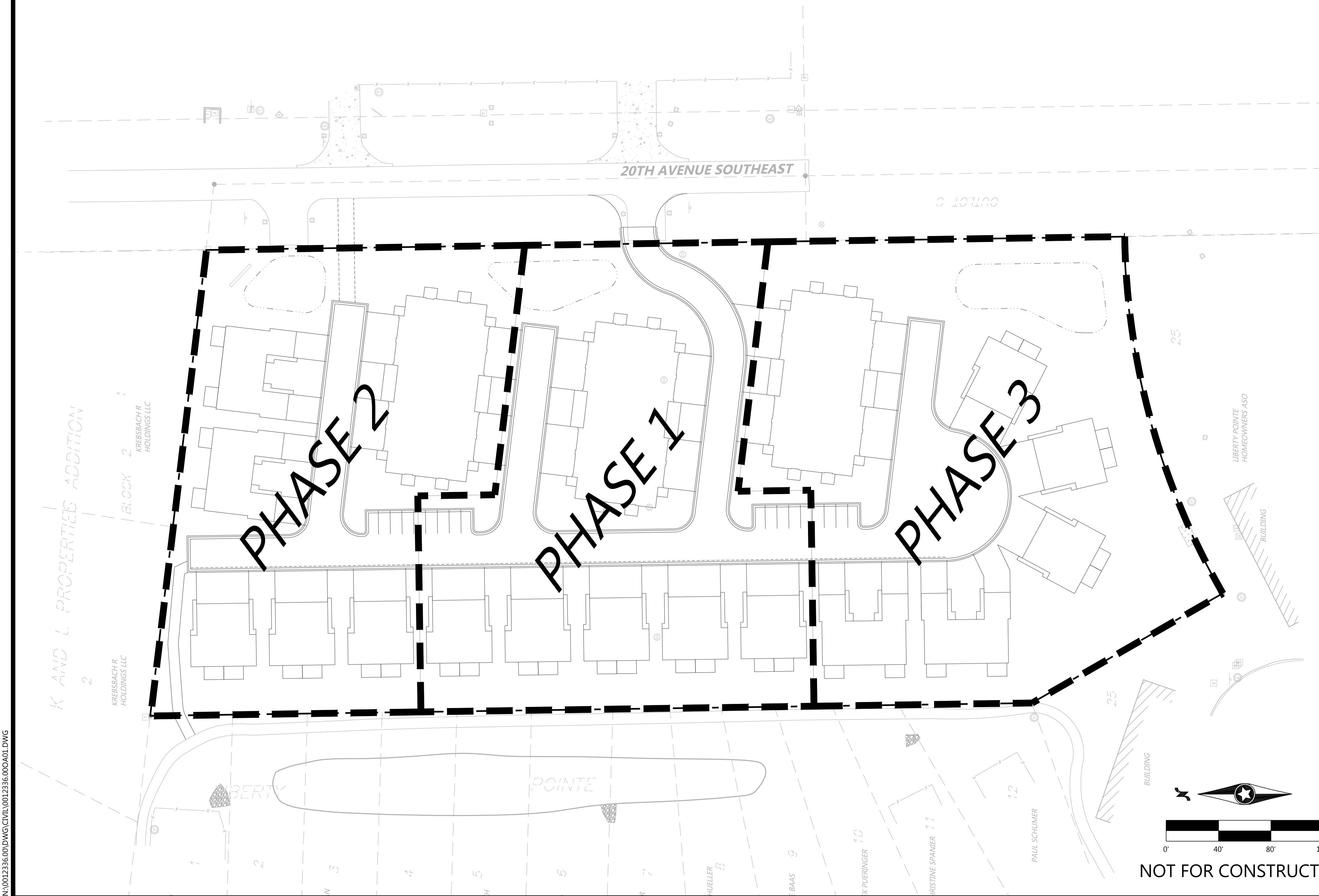
DATE: 04/02/18

0012336.00

N:\0012336\00\DWG\CIVIL\0012336.00SP01.DWG

SOUTHVIEW HEIGHTS

PHASING SUMMARY			
PHASE	PATIO HOMES	DUPLEX'S	8-PLEX'S
1	0	5	1
2	2	3	1
3	2	3	1
TOTAL	4	11	3



N:\012336\00\DWG\CIVIL\012336\00A01.DWG

SOUTHVIEW HEIGHTS

DESIGNED: WRH
 CHECKED: WRH
 DRAWN: JJN
 FIELD CREW:
 FIELD WORK DATE:

INITIAL ISSUE: 02/13/18
 REVISIONS:
 04/02/18 - REVISED PER CITY COMMENTS

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
 140 75TH STREET NE
 RICE, MN 56367

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

WILLIAM R. HUSTON
 DATE: 04/02/18 LICENSE NO. 44984

SOUTHVIEW HEIGHTS
 ST. JOSEPH, MN

Westwood
 Phone (320) 253-9495 3701 12th Street North, Suite 206
 Fax (320) 358-2001 St. Cloud, MN 56303
 Toll Free (800) 270-9495 westwoodps.com
 Westwood Professional Services, Inc.

PHASING PLAN

SHEET NUMBER:
4 OF **11**
 DATE: 04/02/18

FILTRATION/INFILTRATION BASIN NOTES

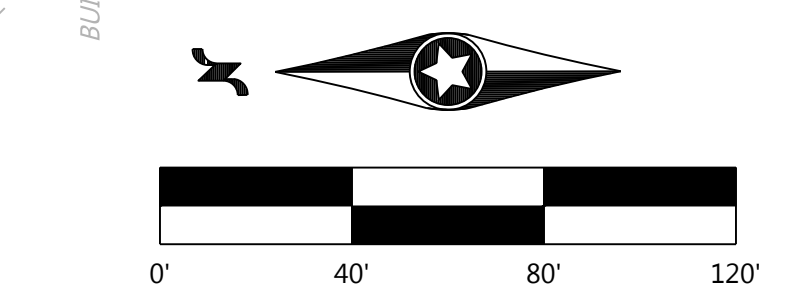
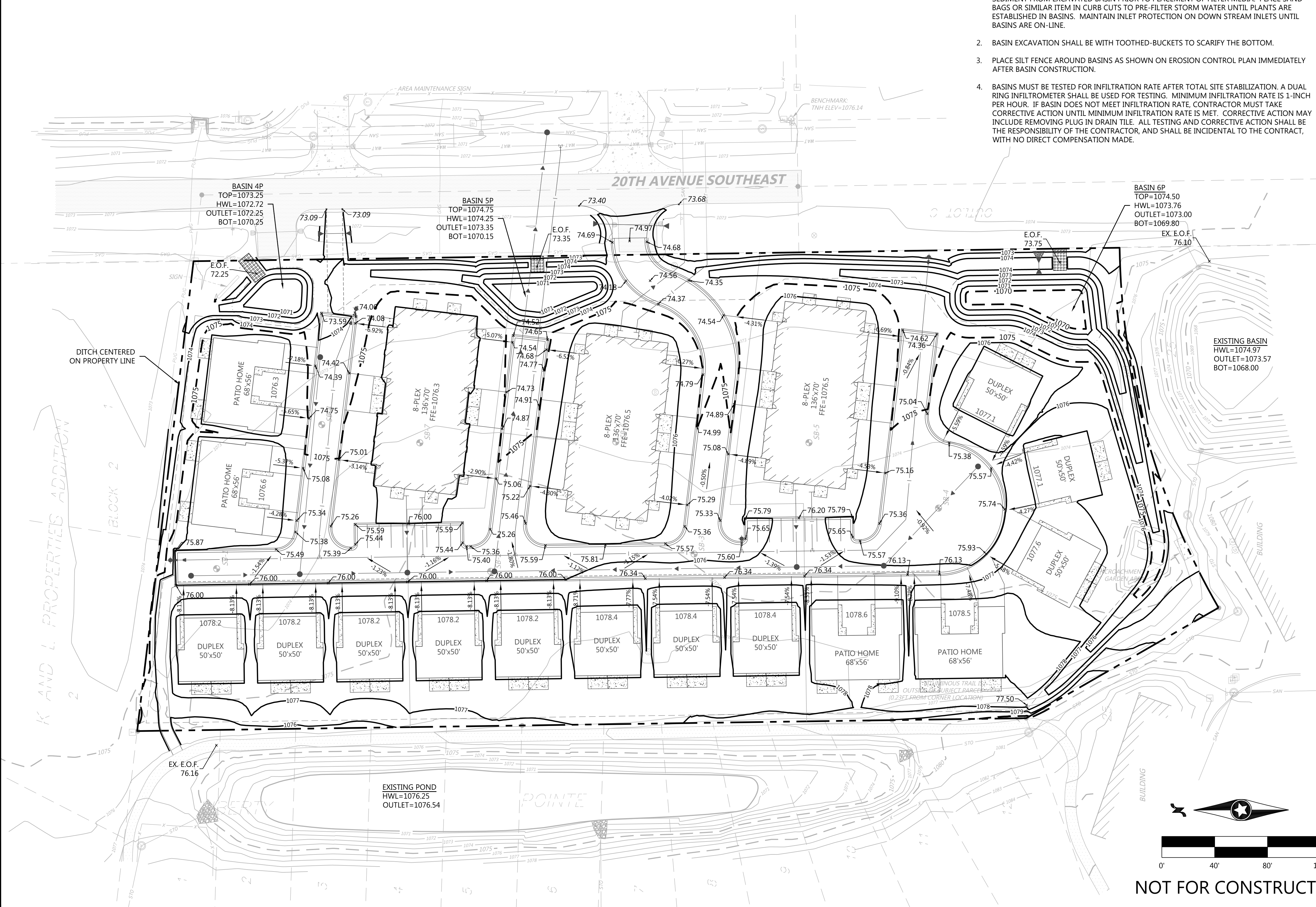
1. BASIN EXCAVATION AND PIPE INSTALLATION MAY TAKE PLACE BEFORE CURB INSTALLATION. ALL OTHER BASIN CONSTRUCTION MUST WAIT UNTIL FINAL SITE LANDSCAPING. REMOVE SEDIMENT FROM EXCAVATED BASIN PRIOR TO PLACEMENT OF FILTER MEDIA. PLACE SAND BAGS OR SIMILAR ITEM IN CURB CUTS TO PRE-FILTER STORM WATER UNTIL PLANTS ARE ESTABLISHED IN BASINS. MAINTAIN INLET PROTECTION ON DOWN STREAM INLETS UNTIL BASINS ARE ON-LINE.
2. BASIN EXCAVATION SHALL BE WITH TOOTHED-BUCKETS TO SCARIFY THE BOTTOM.
3. PLACE SILT FENCE AROUND BASINS AS SHOWN ON EROSION CONTROL PLAN IMMEDIATELY AFTER BASIN CONSTRUCTION.
4. BASINS MUST BE TESTED FOR INFILTRATION RATE AFTER TOTAL SITE STABILIZATION. A DUAL RING INFILTRMETER SHALL BE USED FOR TESTING. MINIMUM INFILTRATION RATE IS 1-INCH PER HOUR. IF BASIN DOES NOT MEET INFILTRATION RATE, CONTRACTOR MUST TAKE CORRECTIVE ACTION UNTIL MINIMUM INFILTRATION RATE IS MET. CORRECTIVE ACTION MAY INCLUDE REMOVING PLUG IN DRAIN TILE. ALL TESTING AND CORRECTIVE ACTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE INCIDENTAL TO THE CONTRACT, WITH NO DIRECT COMPENSATION MADE.

GRADING LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		INDEX CONTOUR
		INTERVAL CONTOUR
		CURB AND GUTTER
		POND NORMAL WATER LEVEL
		STORM SEWER
		FLARED END SECTION (WITH RIPRAP)
		WATER MAIN
		SANITARY SEWER
		RETAINING WALL
		DRAIN TILE
		RIDGE LINE
		GRADING LIMITS
		SPOT ELEVATION
		FLOW DIRECTION
		TOP AND BOTTOM OF RETAINING WALL
		EMERGENCY OVERFLOW
		SOIL BORING LOCATION

GRADING NOTES

1. LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
2. CONTRACTORS SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVEMENT, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRANCE LOCATIONS, AND EXACT LOCATIONS AND NUMBER OF DOWNSPOUTS.
3. ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR TRENCH EXCAVATION AND BACKFILL/SURFACE RESTORATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
4. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL AND SOD OR SEED. THESE AREAS SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. SEE LANDSCAPE PLAN FOR PLANTING AND TURF ESTABLISHMENT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS.
6. ALL SLOPES SHALL BE GRADED TO 3:1 OR FLATTER, UNLESS OTHERWISE INDICATED ON THIS SHEET.
7. CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AND PROVIDE A SMOOTH FINISHED SURFACE WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN OR BETWEEN SUCH POINTS AND EXISTING GRADES.
8. SPOT ELEVATIONS SHOWN INDICATE FINISHED PAVEMENT ELEVATIONS & GUTTER FLOW LINE UNLESS OTHERWISE NOTED. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE.
9. SEE SOILS REPORT FOR PAVEMENT THICKNESSES AND HOLD DOWNS.
10. CONTRACTOR SHALL DISPOSE OF ANY EXCESS SOIL MATERIAL THAT EXISTS AFTER THE SITE GRADING AND UTILITY CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS SOIL MATERIAL IN A MANNER ACCEPTABLE TO THE OWNER AND THE REGULATING AGENCIES.
11. ALL CONSTRUCTION SHALL CONFORM TO LOCAL, STATE AND FEDERAL RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
12. PRIOR TO PLACEMENT OF ANY STRUCTURE OR PAVEMENT, A PROOF ROLL, AT MINIMUM, WILL BE REQUIRED ON THE SUBGRADE. PROOF ROLLING SHALL BE ACCOMPLISHED BY MAKING MINIMUM OF 2 COMPLETE PASSES WITH FULLY-LOADED TANDEM-AXLE DUMP TRUCK, OR APPROVED EQUAL, IN EACH OF 2 PERPENDICULAR DIRECTIONS WHILE UNDER SUPERVISION AND DIRECTION OF THE INDEPENDENT TESTING LABORATORY. AREAS OF FAILURE SHALL BE EXCAVATED AND RE-COMPACTED AS SPECIFIED HEREIN.
13. EMBANKMENT MATERIAL PLACED BENEATH BUILDINGS AND STREET OR PARKING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFIED DENSITY METHOD AS OUTLINED IN MNDOT 2105.3F1 AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
14. EMBANKMENT MATERIAL NOT PLACED IN THE BUILDING PAD, STREETS OR PARKING AREA, SHALL BE COMPACTED IN ACCORDANCE WITH REQUIREMENTS OF THE ORDINARY COMPACTION METHOD AS OUTLINED IN MNDOT 2105.3F2.
15. ALL SOILS AND MATERIALS TESTING SHALL BE COMPLETED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. EXCAVATION FOR THE PURPOSE OF REMOVING UNSTABLE OR UNSUITABLE SOILS SHALL BE COMPLETED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOILS TESTS AND INSPECTIONS WITH THE GEOTECHNICAL ENGINEER.



NOT FOR CONSTRUCTION

DESIGNED:	WRH
CHECKED:	WRH
DRAWN:	JJN
FIELD CREW:	
FIELD WORK DATE:	

INITIAL ISSUE:	02/13/18
REVISIONS:	04/02/18 - REVISED PER CITY COMMENTS

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
140 75TH STREET NE
RICE, MN 56367

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
WILLIAM R. HUSTON
DATE: 04/02/18 LICENSE NO. 44984

SOUTHVIEW HEIGHTS
ST. JOSEPH, MN

Westwood
Phone (320) 253-9495 3701 12th Street North, Suite 206
Fax (320) 358-2001 St. Cloud, MN 56303
Toll Free (800) 270-9495 westwoodps.com
Westwood Professional Services, Inc.

SHEET NUMBER:
5 OF **11**
DATE: 04/02/18

N:\0012336\00\DWG\CIVIL\0012336.DWG

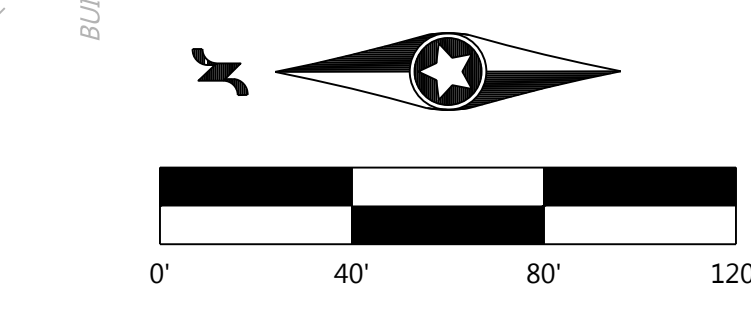
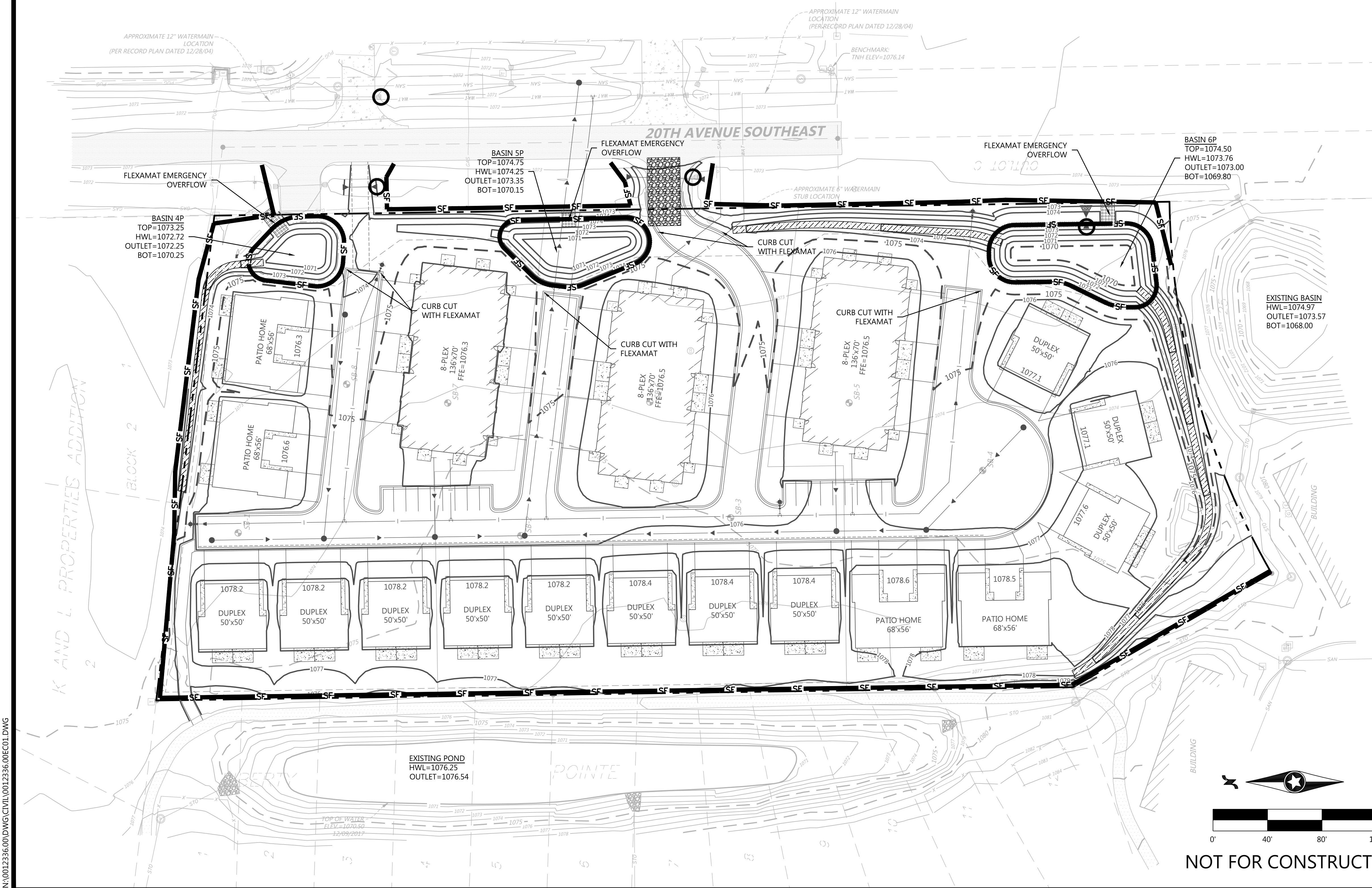
SOUTHVIEW HEIGHTS

EROSION CONTROL LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		INDEX CONTOUR
		INTERVAL CONTOUR
		CURB AND GUTTER
		POND NORMAL WATER LEVEL
		SILT FENCE
		STORM SEWER
		FLARED END SECTION (WITH RIPRAP)
		WATER MAIN
		SANITARY SEWER
		GRADING LIMITS
		ROCK CONSTRUCTION ENTRANCE
		EROSION CONTROL BLANKET
		TURF REINFORCEMENT MAT
		EMERGENCY OVERFLOW
		SOIL BORING LOCATION
		INLET PROTECTION

GENERAL EROSION CONTROL NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND LIMITED MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION SHALL NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OR ENGINEER OF DISCREPANCIES.
2. ALL SILT FENCE AND OTHER EROSION CONTROL FEATURES SHALL BE IN-PLACE PRIOR TO ANY EXCAVATION/CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED. EXISTING SILT FENCE ON-SITE SHALL BE MAINTAINED AND/OR REMOVED AND SHALL BE CONSIDERED INCIDENTAL TO THE GRADING CONTRACT. IT IS OF EXTREME IMPORTANCE TO BE AWARE OF CURRENT FIELD CONDITIONS WITH RESPECT TO EROSION CONTROL. TEMPORARY PONDING, DIKES, HAYBALES, ETC., REQUIRED BY THE CITY SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
3. EROSION AND SILTATION CONTROL (ESC): THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL THE EROSION AND SILTATION INCLUDING BUT NOT LIMITED TO: CATCH BASIN INSERTS, CONSTRUCTION ENTRANCES, EROSION CONTROL BLANKET, AND SILT FENCE. ESC SHALL COMMENCE WITH GRADING AND CONTINUE THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER. THE CONTRACTOR'S RESPONSIBILITY INCLUDES ALL IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER MAY DIRECT THE CONTRACTOR'S METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITION OF SILT OR MUD ON NEW OR EXISTING PAVEMENT OR IN EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN EVENT. AFFECTED AREAS SHALL BE CLEANED TO THE SATISFACTION OF THE OWNER, ALL AT THE EXPENSE OF THE CONTRACTOR. ALL TEMPORARY EROSION CONTROL SHALL BE REMOVED BY THE CONTRACTOR AFTER THE TURF IS ESTABLISHED.
4. ALL STREETS DISTURBED DURING WORKING HOURS MUST BE CLEANED AT THE END OF EACH WORKING DAY. A CONSTRUCTION ENTRANCE TO THE SITE MUST BE PROVIDED ACCORDING TO DETAILS TO REDUCE TRACKING OF DIRT ONTO PUBLIC STREETS.
5. PROPOSED PONDS SHALL BE EXCAVATED FIRST AND USED AS TEMPORARY PONDING DURING CONSTRUCTION.
6. WHEN INSTALLING END-OF-LINE FLARED END SECTIONS, BRING THE SILT FENCE UP & OVER THE FLARED END SECTIONS & COVER DISTURBED AREAS WITH RIP RAP. THE UPSTREAM FLARED END SECTIONS SHALL HAVE WOOD FIBER BLANKET INSTALLED ON THE DISTURBED SOILS.
7. ALL UNPAVED AREAS ALTERED DUE TO CONSTRUCTION ACTIVITIES MUST BE RESTORED WITH SEED AND MULCH, SOD, EROSION CONTROL BLANKET OR BE HARD SURFACE WITHIN 2 WEEKS OF COMPLETION OF CONSTRUCTION.
8. THE SITE MUST BE STABILIZED WITH A 25-151 SEED MIX AT 70-POUNDS PER ACRE AND TYPE I MULCH AT 2-TONS PER ACRE IN ACCORDANCE WITH MNDOT 2575 UNLESS OTHERWISE NOTED.
9. TEMPORARY SEEDING SHALL BE MN/DOT SEED MIX 22-111 AT 40-POUNDS PER ACRE AND TYPE I MULCH AT 2-TONS PER ACRE IN ACCORDANCE WITH MNDOT 2575 UNLESS OTHERWISE NOTED.
10. FOR AREAS WITH SLOPE OF 3:1 OR GREATER, RESTORATION WITH SOD OR EROSION CONTROL BLANKET IS REQUIRED.
11. ALL TEMPORARY STOCKPILES MUST HAVE SILT FENCE INSTALLED AROUND THEM TO TRAP SEDIMENT.
12. ALL PERMANENT PONDS USED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION SHALL BE DREDGED AFTER THE SITE HAS BEEN STABILIZED TO RESTORE THE POND TO THE PROPOSED BOTTOM ELEVATION.
13. ALL CONSTRUCTION SHALL CONFORM TO LOCAL AND STATE RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
14. THE SITE MUST BE KEPT IN A WELL-DRAINED CONDITION AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS REQUIRED TO INSURE PROPER DRAINAGE DURING CONSTRUCTION. LOW POINTS IN ROADWAYS OR BUILDING PADS MUST BE PROVIDED WITH A POSITIVE OUTFLOW.
15. PUBLIC STREETS USED FOR HAULING SHALL BE KEPT FREE OF SOIL AND DEBRIS. STREET SWEEPING SHALL BE CONCURRENT WITH SITE WORK.



NOT FOR CONSTRUCTION

N:\0012336\00\DWG\CIVIL\0012336\06EC01.DWG

DESIGNED:	WRH
CHECKED:	WRH
DRAWN:	JJN
FIELD CREW:	
FIELD WORK DATE:	

INITIAL ISSUE:	02/13/18
REVISIONS:	
04/02/18 -	REVISED PER CITY COMMENTS

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
140 75TH STREET NE
RICE, MN 56367

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
WILLIAM R. HUSTON
DATE: 04/02/18 LICENSE NO. 44984

SOUTHVIEW HEIGHTS
ST. JOSEPH, MN

Westwood
Phone (320) 253-9495 3701 12th Street North, Suite 206
Fax (320) 358-2001 St. Cloud, MN 56303
Toll Free (800) 270-9495 westwoodps.com
Westwood Professional Services, Inc.

EROSION CONTROL PLAN

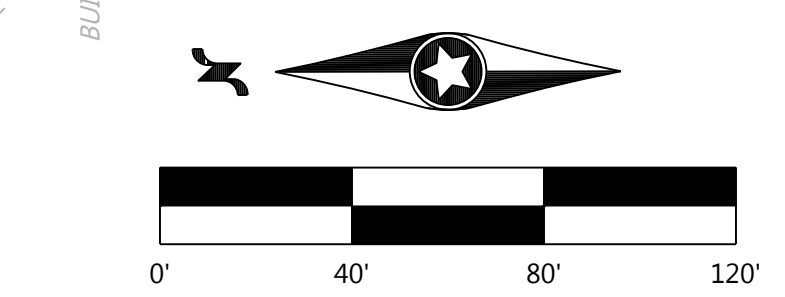
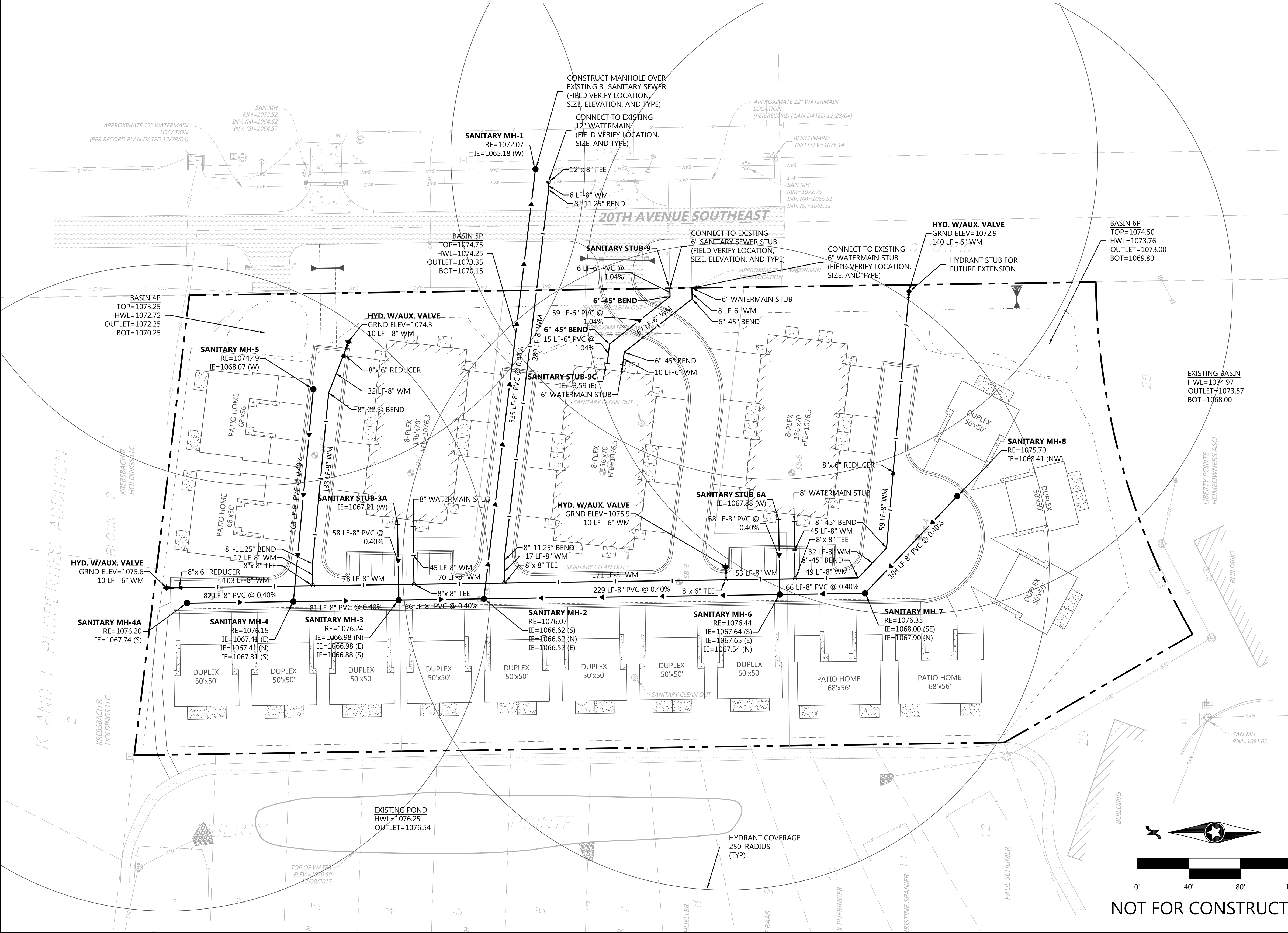
SHEET NUMBER:
6 OF **11**
DATE: 04/02/18

SANITARY SEWER AND WATERMAIN LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		EASEMENT LINE
		CURB AND GUTTER
		SANITARY SEWER
		SANITARY SEWER FORCE MAIN
		STORM SEWER
		WATER MAIN
		HYDRANT
		GAS
		UNDERGROUND ELECTRIC
		OVERHEAD ELECTRIC
		UNDERGROUND TELEPHONE
		OVERHEAD TELEPHONE
		TELEPHONE FIBER OPTIC
		CABLE TELEVISION
		GATE VALVE
		FLARED END SECTION (WITH RIPRAP)
		LIGHT POLE

WATERMAIN & SANITARY SEWER NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND LIMITED MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION SHALL NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OR ENGINEER OF DISCREPANCIES.
2. ALL SANITARY SEWER AND WATER MAIN MATERIAL AND INSTALLATIONS SHALL BE PER CITY REQUIREMENTS, MINNESOTA PLUMBING CODE, AND IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION AND SANITARY SEWER AND STORM SEWER INSTALLATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN THE NECESSARY FEDERAL, STATE AND LOCAL PERMITS FOR THE PROPOSED WORK OR VERIFY WITH THE OWNER OR ENGINEER THAT PERMITS HAVE BEEN OBTAINED. PERMIT FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE ARRANGED WITH THE OWNER.
4. ALL PRIVATE UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE SERVICE LINE CONSTRUCTION WITH THE UTILITY COMPANIES.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY CITY PERMITS FOR UTILITY CONNECTIONS, AND UTILITIES SHALL BE INSPECTED AND APPROVED BY THE CITY. THE CITY SHALL BE NOTIFIED 48-HOURS PRIOR TO COMMENCING WITH THE UTILITY CONSTRUCTION OR ANY REQUIRED TESTING. CONTRACTOR SHALL NOT OPERATE, INTERFERE WITH, CONNECT ANY PIPE OR HOSE TO, OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCES OF SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. WATER MAIN LENGTHS AS SHOWN ARE APPROXIMATE HORIZONTAL LENGTHS. ALLOW FOR ADDITIONAL PIPE WHEN INSTALLING ON SLOPES OR WHEN DEFLECTIONS ARE REQUIRED. THE JOINT DEFLECTIONS SHALL NOT EXCEED THE MAXIMUM RECOMMENDED BY THE PIPE MANUFACTURER OR BY LOCAL GOVERNING SPECIFICATIONS. FITTINGS REQUIRED TO CONSTRUCT WATER MAIN SHALL BE INCLUDED IN WATER MAIN CONSTRUCTION.
7. PROVIDE WATER MAIN THRUST RESTRAINTS PER CITY STANDARD REQUIREMENTS.
8. A MINIMUM VERTICAL SEPARATION OF 18 INCHES IS REQUIRED AT ALL WATER LINE CROSSINGS WITH SANITARY SEWER OR STORM SEWER. THE WATER LINE SHALL NOT HAVE JOINTS OR CONNECTION WITHIN 10- FEET OF THE CROSSING. INSULATE CROSSINGS WITH STORM SEWER.
9. ALL WATER LINES SHALL HAVE 8' MINIMUM COVER. INSULATE WATER MAIN IF LESS THAN 8' OF COVER. INSULATION SHALL BE DOW STYROFOAM HI BRAND 35 OR EQUIVALENT, WITH 4 INCHES OF THICKNESS.
10. ALL NONCONDUCTIVE PIPE SHALL BE INSTALLED WITH A LOCATE (TRACER) WIRE.
11. AFTER CONSTRUCTION IS COMPLETED, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH AN AS-BUILT RECORD OF UTILITY CONSTRUCTION. THE AS-BUILT SHALL INCLUDE LOCATION AND LENGTH DEVIATIONS OR CHANGES TO THE PLAN. CONTRACTOR TO VERIFY WITH OWNER OR ENGINEER WHETHER A PLAN WITH POST-CONSTRUCTION ELEVATIONS IS REQUIRED.
12. ALL MANHOLE CASTINGS IN PAVED AREAS SHALL BE SUMPED 0.05 FEET. RIM ELEVATIONS ON PLAN REFLECT THE SUMPED ELEVATIONS.



NOT FOR CONSTRUCTION

DESIGNED:	WRH
CHECKED:	WRH
DRAWN:	JJN
FIELD CREW:	
FIELD WORK DATE:	

INITIAL ISSUE: 02/13/18
 REVISIONS:
 04/02/18 - REVISED PER CITY COMMENTS

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
 140 75TH STREET NE
 RICE, MN 56367

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

WILLIAM R. HUSTON
 DATE: 04/02/18 LICENSE NO. 44984

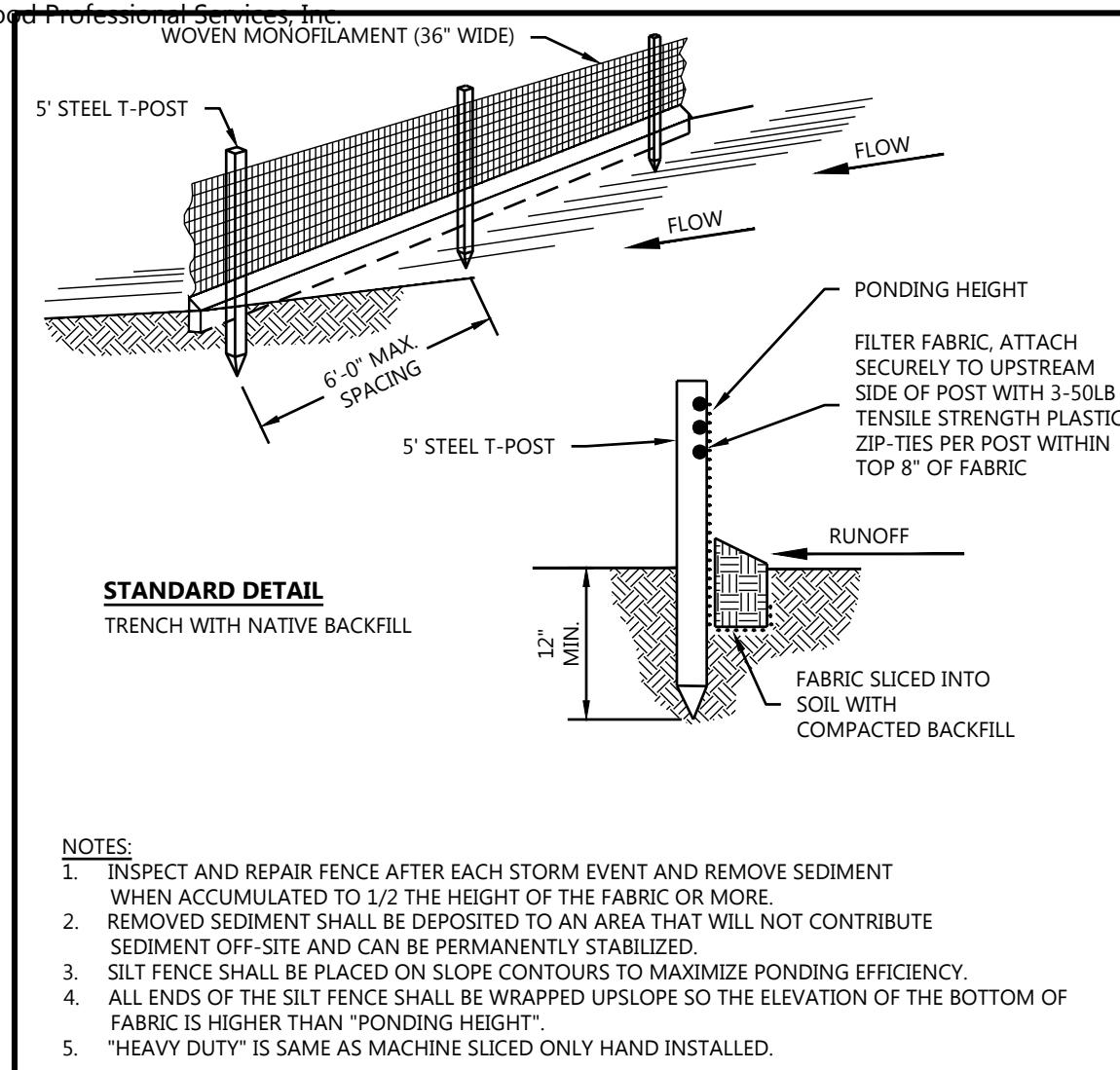
SOUTHVIEW HEIGHTS
 ST. JOSEPH, MN

Westwood
 Phone (320) 253-9495 3701 12th Street North, Suite 206
 Fax (320) 358-2001 St. Cloud, MN 56303
 Toll Free (800) 270-9495 westwoodps.com
 Westwood Professional Services, Inc.

SHEET NUMBER:
7 OF **11**
SANITARY SEWER AND WATERMAIN PLAN
 DATE: 04/02/18

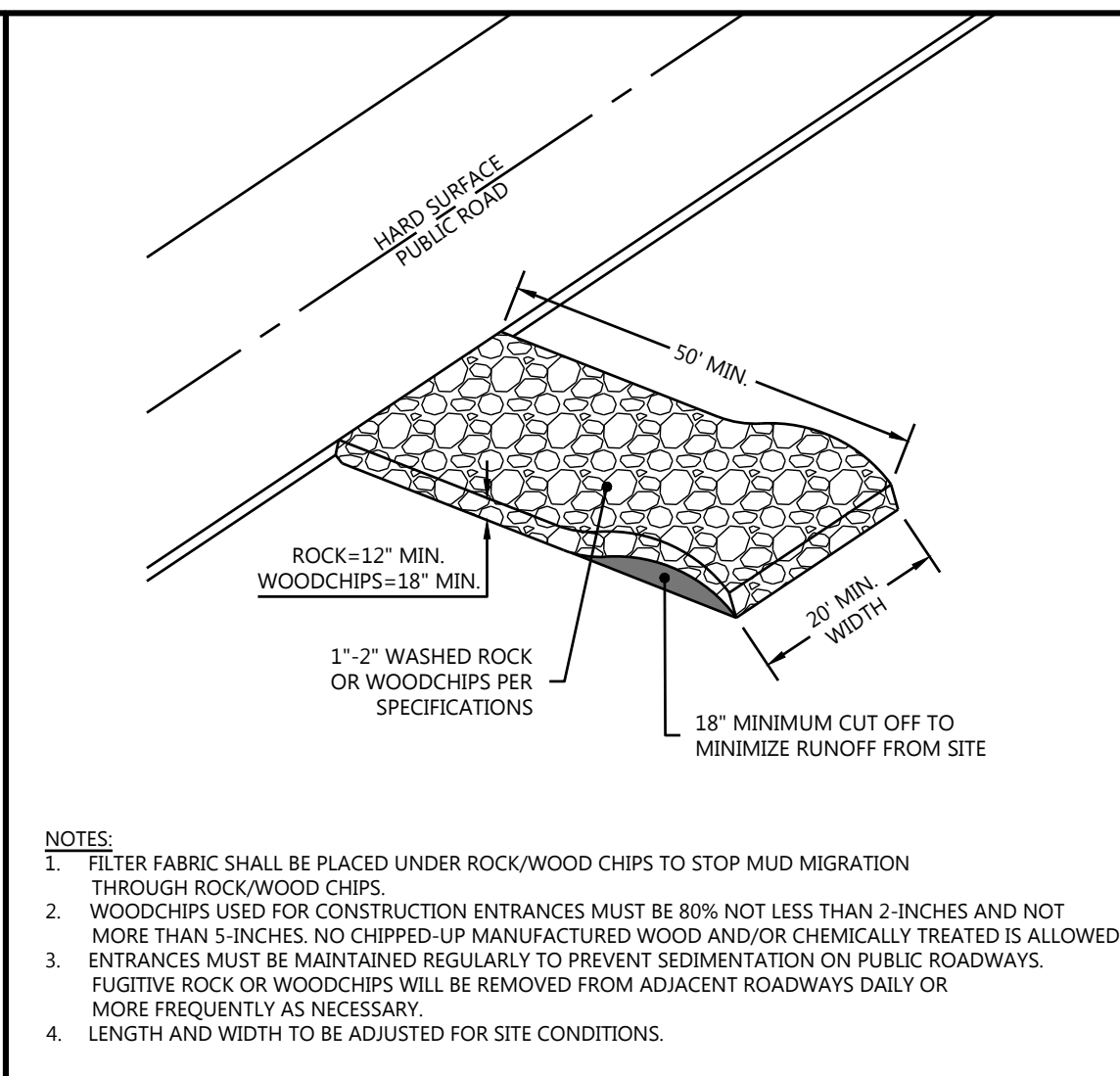
N:\0012336\00\DWG\CIVIL\0012336\00T01.DWG

SOUTHVIEW HEIGHTS



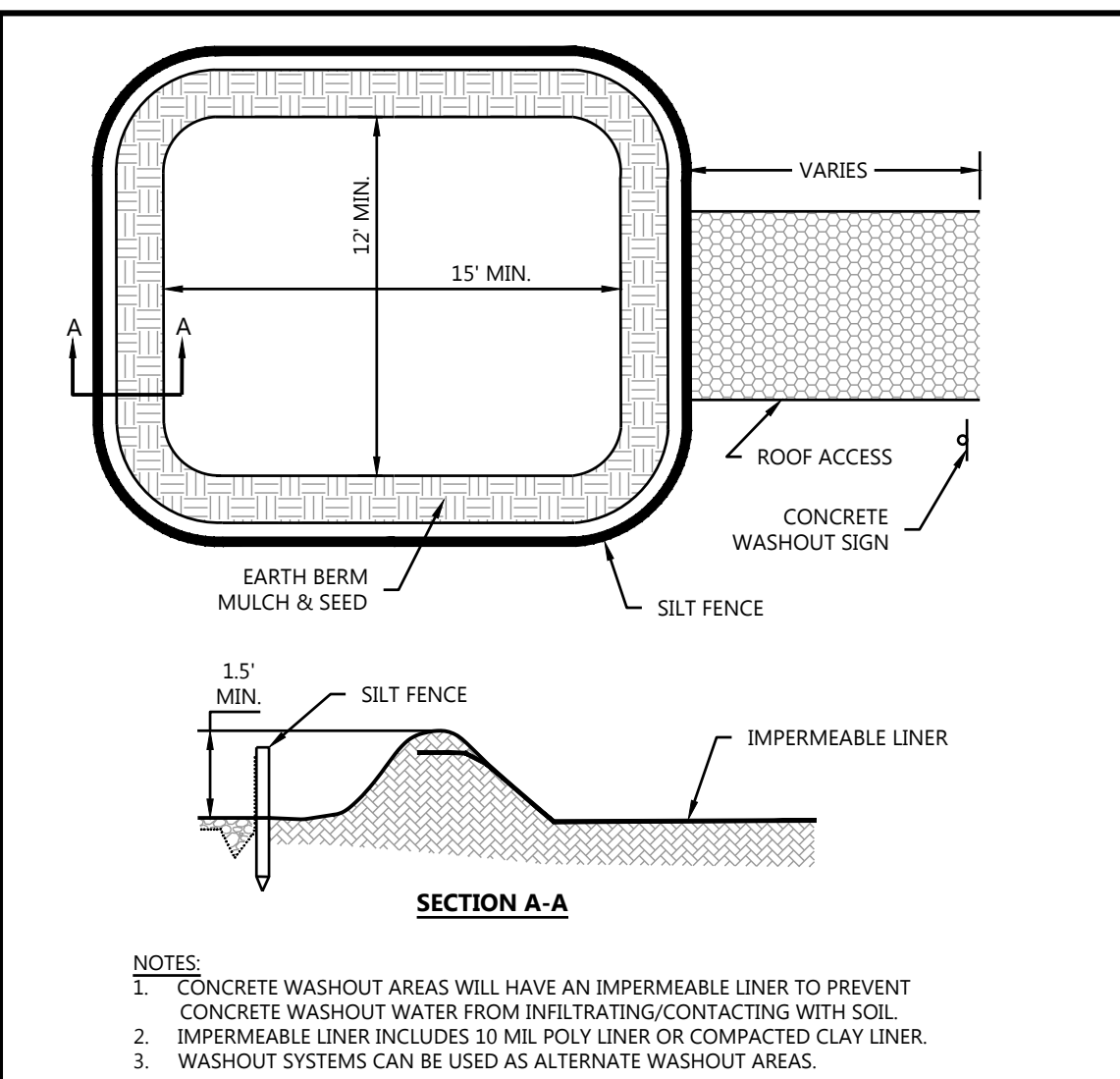
STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL

- NOTES:**
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN ACCUMULATED TO 1/2 THE HEIGHT OF THE FABRIC OR MORE.
 2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
 3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 4. ALL ENDS OF THE SILT FENCE SHALL BE WRAPPED UPSLOPE SO THE ELEVATION OF THE BOTTOM OF FABRIC IS HIGHER THAN "PONDING HEIGHT".
 5. "HEAVY DUTY" IS SAME AS MACHINE SLICED ONLY HAND INSTALLED.



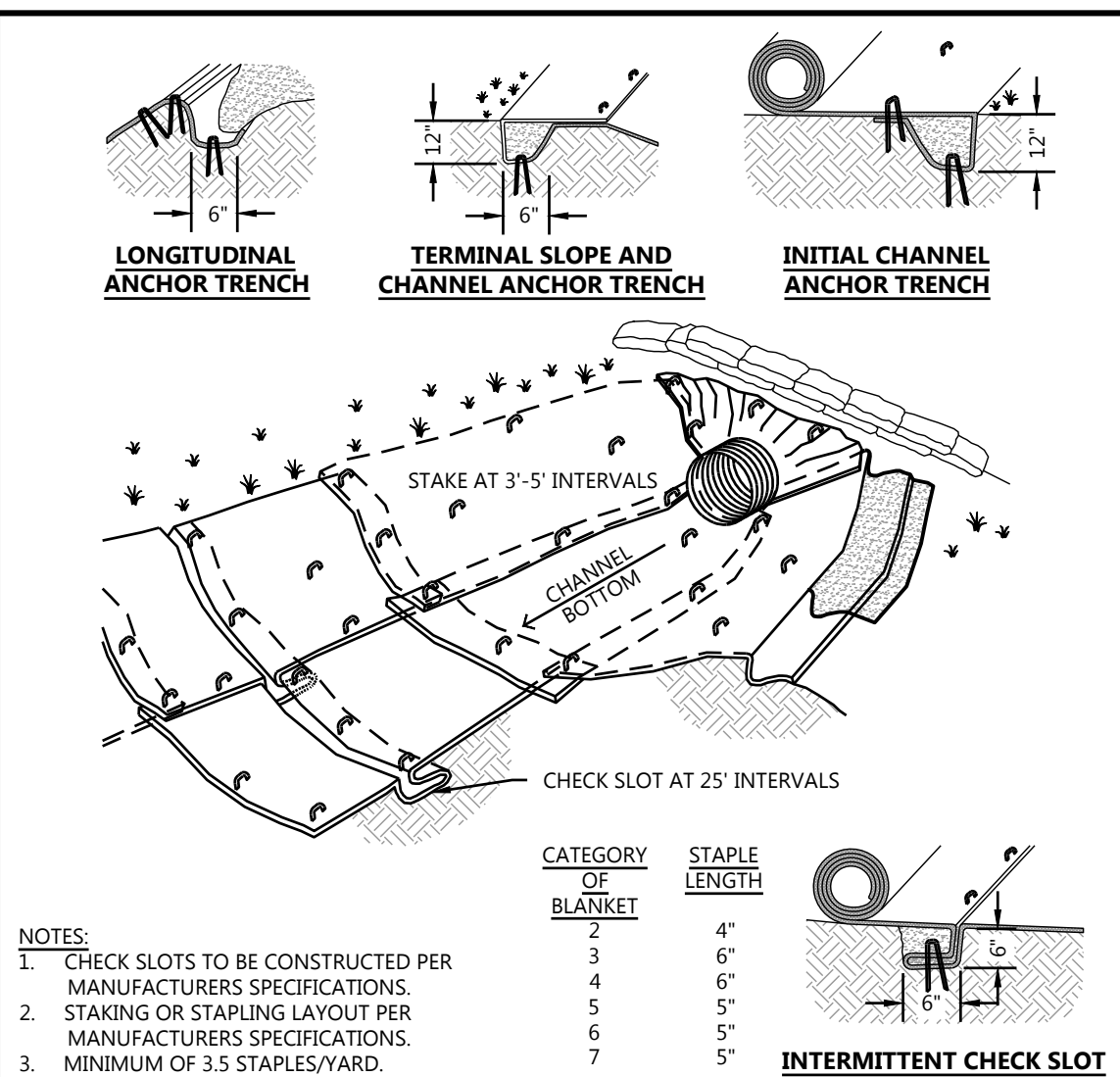
CONSTRUCTION ENTRANCE

- NOTES:**
1. FILTER FABRIC SHALL BE PLACED UNDER ROCK/WOOD CHIPS TO STOP MUD MIGRATION THROUGH ROCK/WOOD CHIPS.
 2. WOODCHIPS USED FOR CONSTRUCTION ENTRANCES MUST BE 80% NOT LESS THAN 2-INCHES AND NOT MORE THAN 5-INCHES. NO CHIPPED-UP MANUFACTURED WOOD AND/OR CHEMICALLY TREATED IS ALLOWED.
 3. ENTRANCES MUST BE MAINTAINED REGULARLY TO PREVENT SEDIMENTATION ON PUBLIC ROADWAYS. FUGITIVE ROCK OR WOODCHIPS WILL BE REMOVED FROM ADJACENT ROADWAYS DAILY OR MORE FREQUENTLY AS NECESSARY.
 4. LENGTH AND WIDTH TO BE ADJUSTED FOR SITE CONDITIONS.



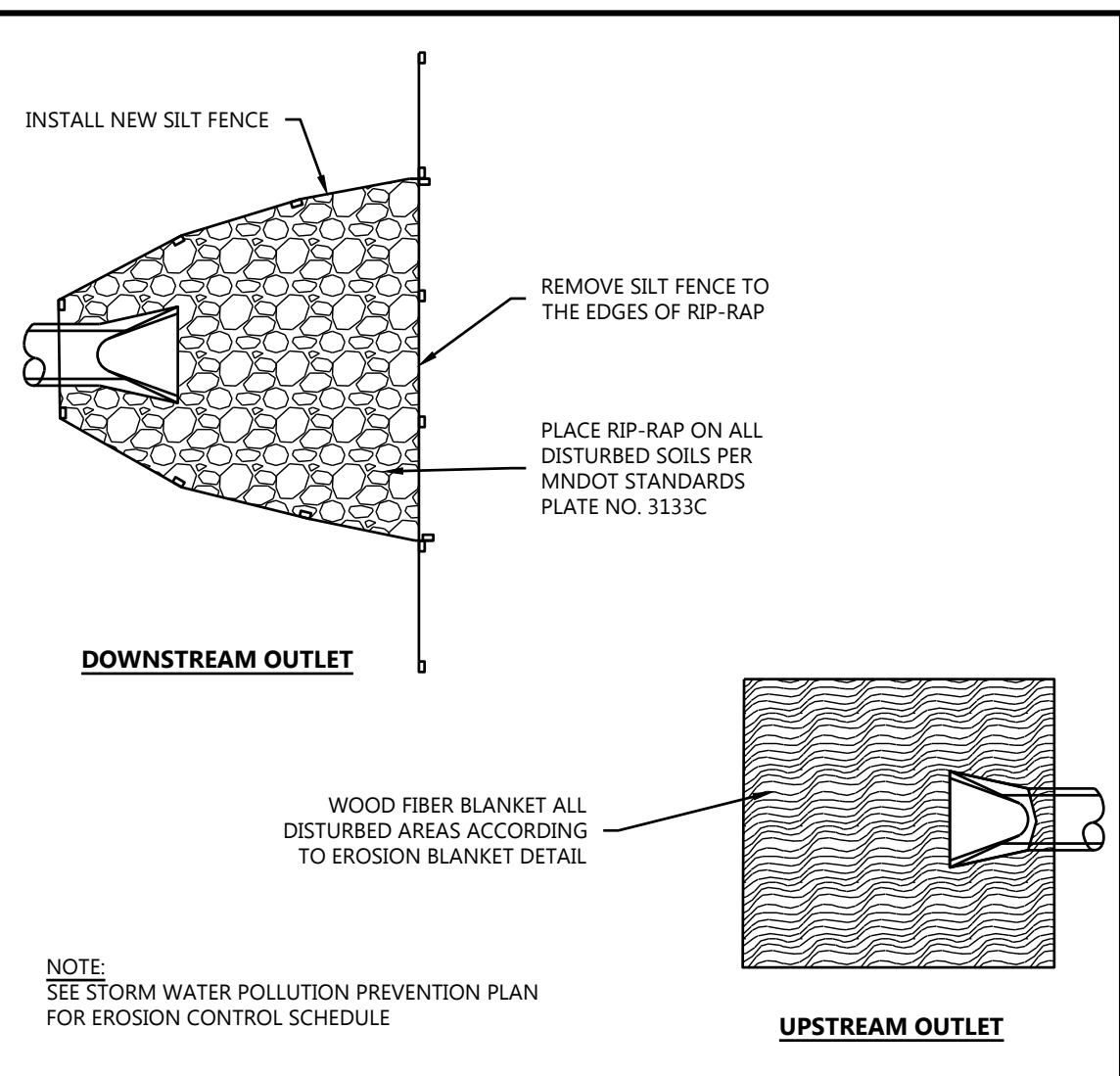
CONCRETE WASHOUT AREA

- NOTES:**
1. CONCRETE WASHOUT AREAS WILL HAVE AN IMPERMEABLE LINER TO PREVENT CONCRETE WASHOUT WATER FROM INFILTRATING/CONTACTING WITH SOIL.
 2. IMPERMEABLE LINER INCLUDES 10 MIL POLY LINER OR COMPACTED CLAY LINER.
 3. WASHOUT SYSTEMS CAN BE USED AS ALTERNATE WASHOUT AREAS.



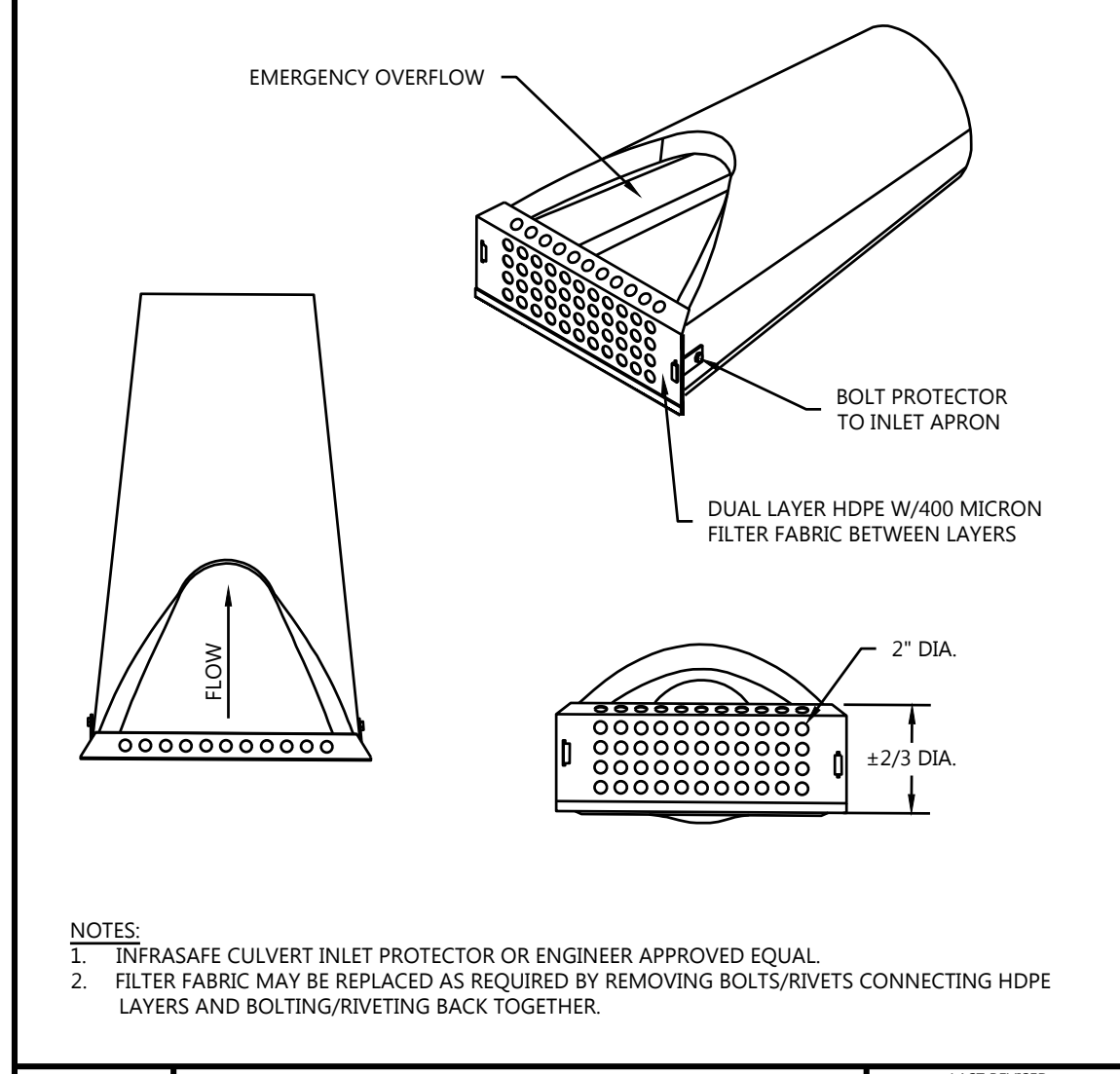
TEMPORARY EROSION BLANKETS
TURF REINFORCEMENT MATS FOR CHANNELS

- NOTES:**
1. CHECK SLOTS TO BE CONSTRUCTED PER MANUFACTURERS SPECIFICATIONS.
 2. STAKING OR STAPLING LAYOUT PER MANUFACTURERS SPECIFICATIONS.
 3. MINIMUM OF 3.5 STAPLES/YARD.



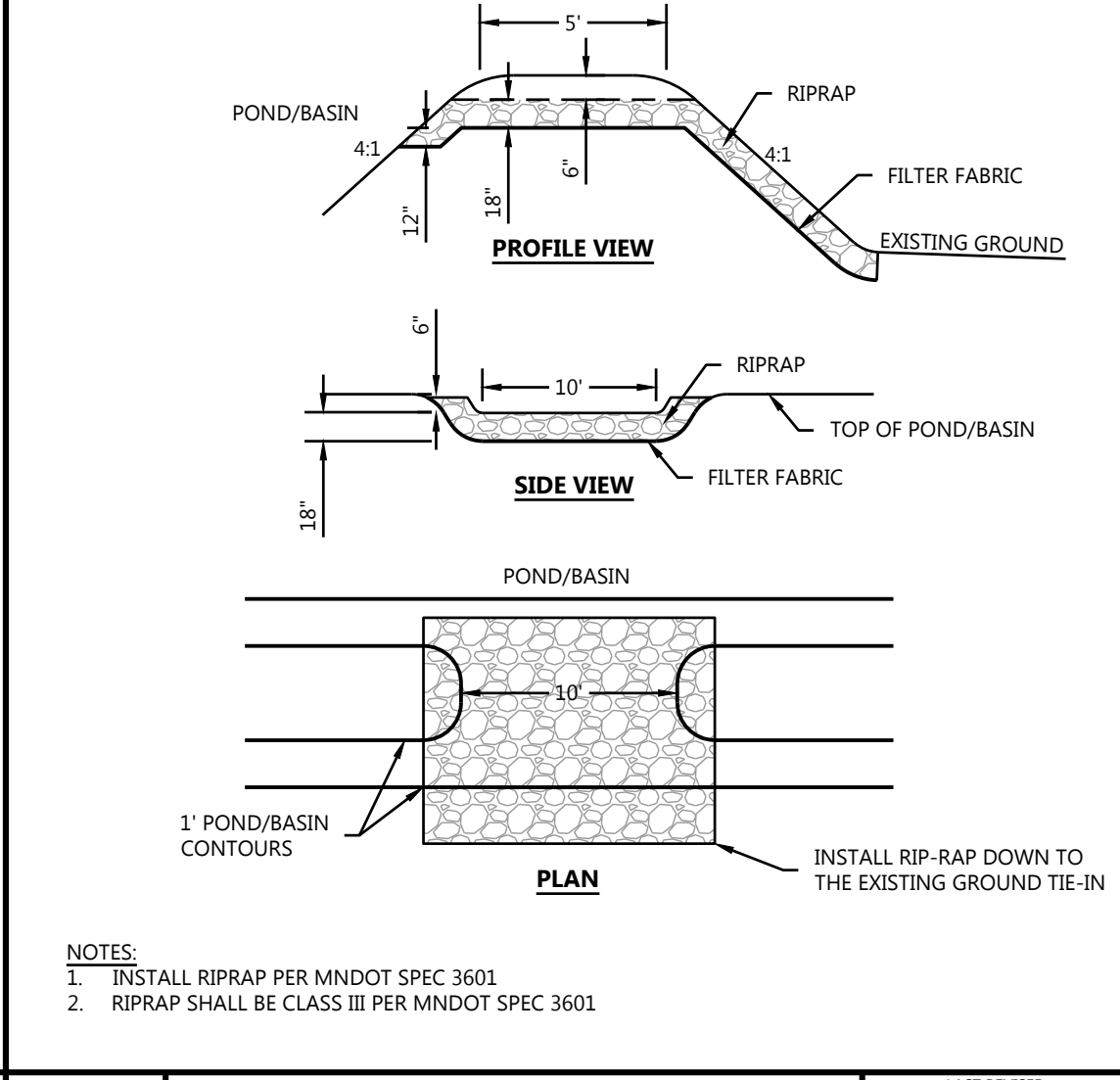
EROSION CONTROL AT FLARED END SECTIONS

- NOTE:**
SEE STORM WATER POLLUTION PREVENTION PLAN FOR EROSION CONTROL SCHEDULE



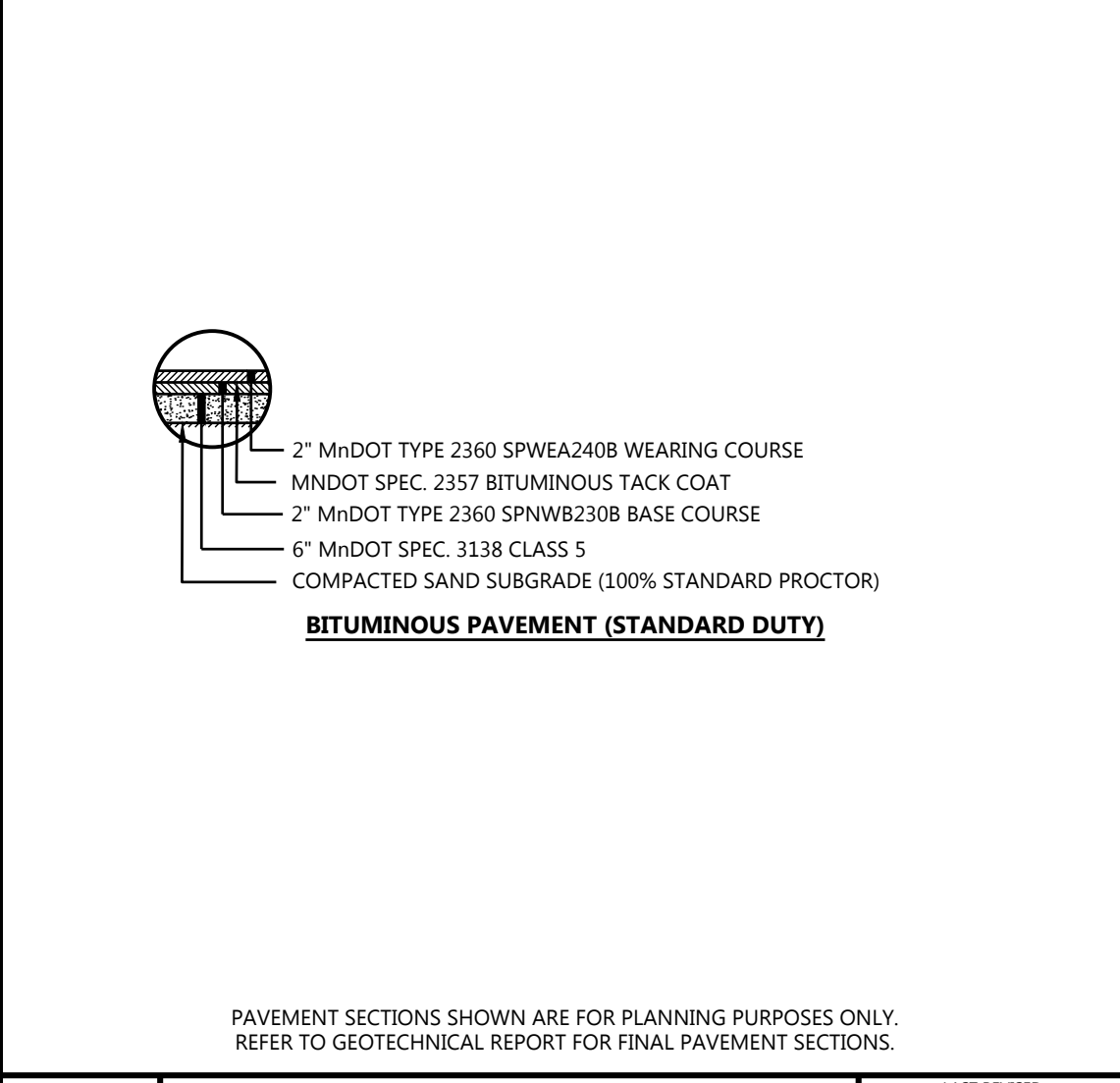
CULVERT INLET PROTECTOR

- NOTES:**
1. INFRASAFE CULVERT INLET PROTECTOR OR ENGINEER APPROVED EQUAL.
 2. FILTER FABRIC MAY BE REPLACED AS REQUIRED BY REMOVING BOLTS/RIVETS CONNECTING HDPE LAYERS AND BOLTING/RIVETING BACK TOGETHER.



RIPRAP OVERFLOW

- NOTES:**
1. INSTALL RIPRAP PER MNDOT SPEC 3601
 2. RIPRAP SHALL BE CLASS III PER MNDOT SPEC 3601



PAVEMENT SECTIONS

- BITUMINOUS PAVEMENT (STANDARD DUTY)**
- PAVEMENT SECTIONS SHOWN ARE FOR PLANNING PURPOSES ONLY. REFER TO GEOTECHNICAL REPORT FOR FINAL PAVEMENT SECTIONS.

N:\012336\00\DWG\CIVIL\0012336.00DT01.DWG

SOUTHVIEW HEIGHTS

DESIGNED: WRH
 CHECKED: WRH
 DRAWN: JIN
 FIELD CREW:
 FIELD WORK DATE:

INITIAL ISSUE: 02/13/18
 REVISIONS:
 04/02/18 - REVISED PER CITY COMMENTS

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
 140 75TH STREET NE
 RICE, MN 56367

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

WILLIAM R. HUSTON
 DATE: 04/02/18 LICENSE NO. 44984

SOUTHVIEW HEIGHTS
 ST. JOSEPH, MN

Westwood
 Phone (320) 253-9495 3701 12th Street North, Suite 206
 Fax (320) 358-2001 St. Cloud, MN 56303
 Toll Free (800) 270-9495 westwoodps.com
 Westwood Professional Services, Inc.

DETAILS

SHEET NUMBER:
9 OF **11**
 DATE: 04/02/18

PLANT SCHEDULE

CODE	QTY.	COMMON	BOTANICAL NAME	SIZE	ROOT
OVERSTORY TREE 44					
ABM	23	AUTUMN BLAZE MAPLE	ACER X FREEMANII 'JEFFERSRED'	1.5" CAL.	B&B
SWO	14	SWAMP WHITE OAK	QUERCUS BICOLOR	1.5" CAL.	B&B
SKH	7	HONEYLOCUST	GLADISTIA TRIACANTHOS VAR. INERMIS 'SKYCOLE'	1.5" CAL.	B&B
ORNAMENTAL TREE 11					
TCH	11	THORNLESS COCKSPUR HAWTHORN	CRATAGUS CRUSGALLI 'INERMIS'	1.5" CAL.	B&B
CONIFEROUS TREE 27					
BHS	16	BLACK HILLS SPRUCE	PICEA GLAUCA DENSATA	4'-0" O.C.	B&B
WHP	11	WHITE PINE	PINUS STROBUS	4'-0" O.C.	B&B
DECIDUOUS SHRUB 183					
CAD	20	CARDINAL DOGWOOD	CORNUS SERICEA 'CARDINAL'	8'-0" O.C.	#5 CONT.
RSB	45	REGENT SERVICEBERRY	AMELANCHIER ALNIFOLIA 'REGENT'	4'-0" O.C.	#5 CONT.
IBH	118	INCREDIBALL HYDRANGEA	HYDRANGEA ABORESCENS 'ABETWO'	4'-0" O.C.	#5 CONT.
PERENNIALS 45					
MIS	45	MISCANTHUS FLAME GRASS	MISCANTHUS SINENSIS 'PURPURASCENS'	36" O.C.	#1 CONT.

QUANTITIES SHOWN IN THE PLANTING SCHEDULE ARE FOR THE CONTRACTOR'S CONVENIENCE. CONTRACTOR TO VERIFY QUANTITIES SHOWN ON THE PLAN.

LANDSCAPE REQUIREMENTS

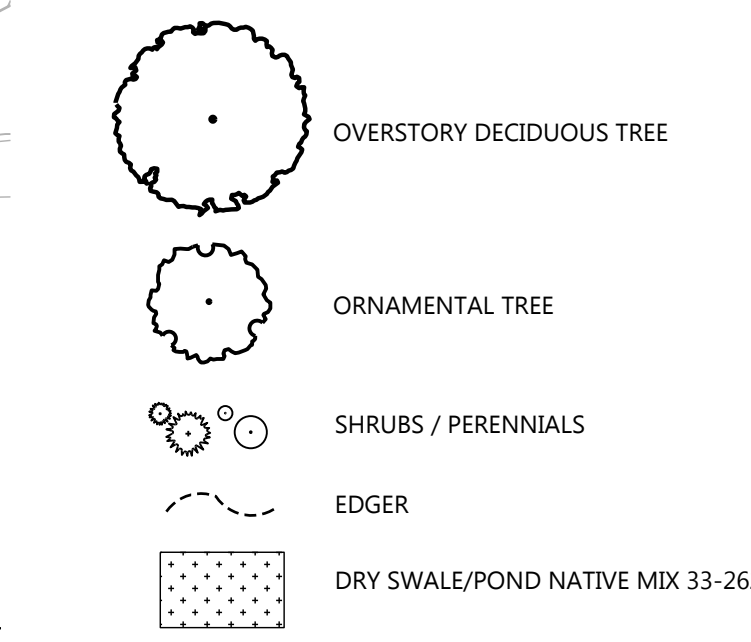
OVERSTORY TREE REQUIREMENTS:	
ONE TREE PER 1,250 SF OF TOTAL BUILDING FLOOR AREA (97,328 SF)	= 78 TREES
OR (WHICHEVER IS GREATER)	
ONE TREE PER 100 LF OF SITE PERIMETER (2,185 LF)	= 22 TREES
(56 trees @ 1.5" CALIPER MINIMUM / 25% REQUIRED TO BE CONIFEROUS)	
ORNAMENTAL TREE REQUIREMENTS:	
ONE ORNAMENTAL TREE CAN BE SUBSTITUTED FOR EVERY 6/10 OVERSTORY DECIDUOUS SHADE TREE.	
UNDERSTORY REQUIREMENTS:	
ONE UNDERSTORY SHRUB PER 450 SF OF BUILDING FLOOR AREA (97,328 SF)	= 216 SHRUBS
OR (WHICHEVER IS GREATER)	
ONE UNDERSTORY SHRUB PER 75 LF OF SITE PERIMETER (2,185 LF)	= 30 SHRUBS
(155 shrubs/perennials)	
OVERALL TOTAL TREE REQUIREMENTS:	
	= 78 TREES
OVERALL TOTAL UNDERSTORY REQUIREMENTS:	
	= 216 SHRUBS
OVERALL TOTAL TREES PROVIDED:	
	= 78 TREES
OVERALL TOTAL UNDERSTORY PROVIDED:	
	= 228 SHRUBS/PERENNIALS

- **NOTES:**
- STREET TREE LOCATIONS AND SPACING ARE SUBJECT TO CHANGE BASED ON CONSTRUCTED DRIVEWAY AND UTILITY LOCATIONS.
 - ALL DISTURBED AREAS TO BE SODDED, UNLESS OTHERWISE NOTED.

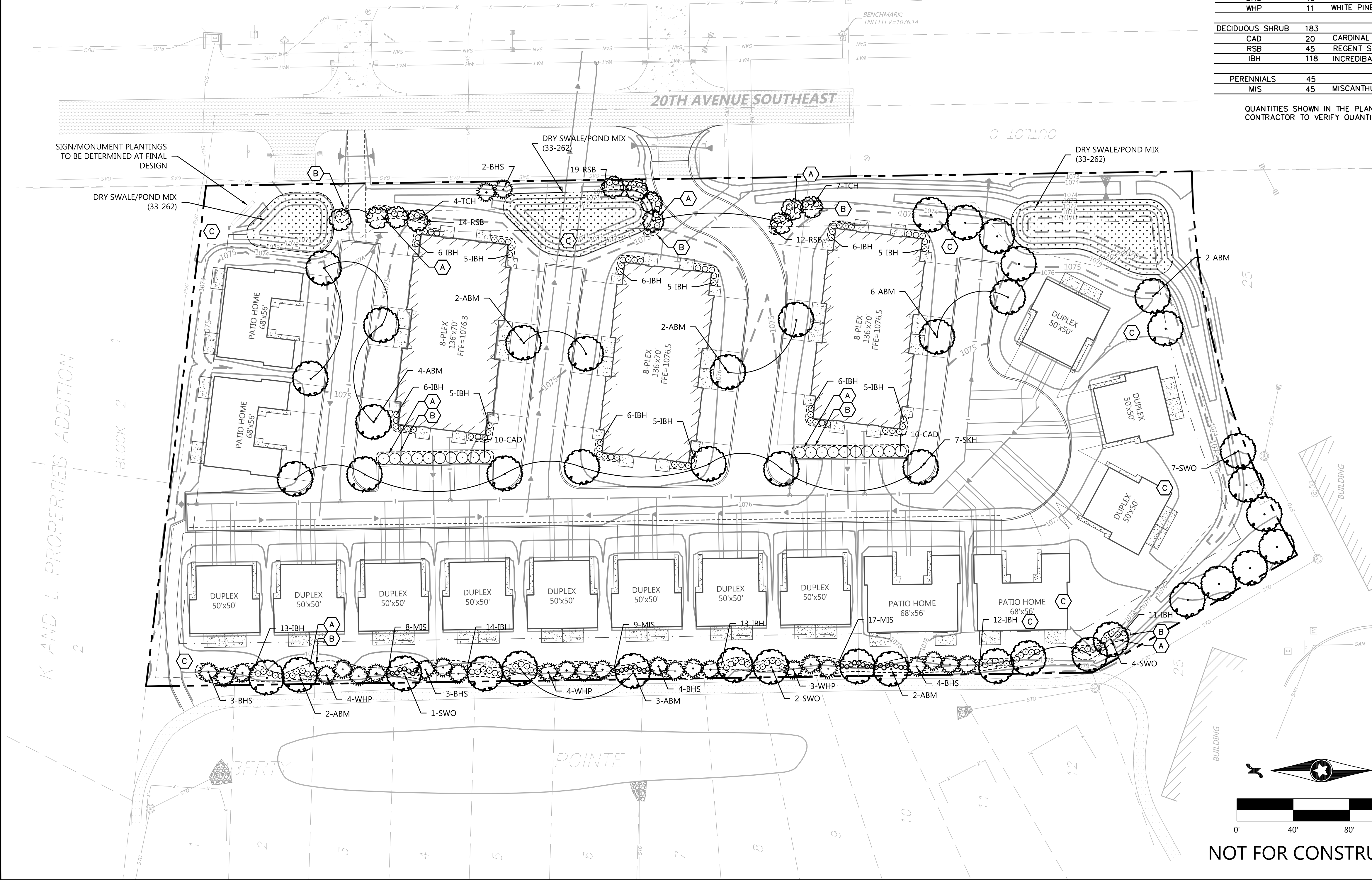
LANDSCAPE KEYNOTES

- A SHREDDED HARDWOOD MULCH (TYP.)
- B EDGER (TYP.)
- C SOD (TYP.)

LANDSCAPE LEGEND



NOT FOR CONSTRUCTION



DESIGNED:	SYE
CHECKED:	JRW
DRAWN:	SYE
FIELD CREW:	
FIELD WORK DATE:	

INITIAL ISSUE:	02/13/18
REVISIONS:	04/02/18 - REVISED PER CITY COMMENTS

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
 140 75TH STREET NE
 RICE, MN 56367

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA
JEFFREY R. WESTENDORF
 DATE: 04/02/18 LICENSE NO. 44018

SOUTHVIEW HEIGHTS
 ST. JOSEPH, MN

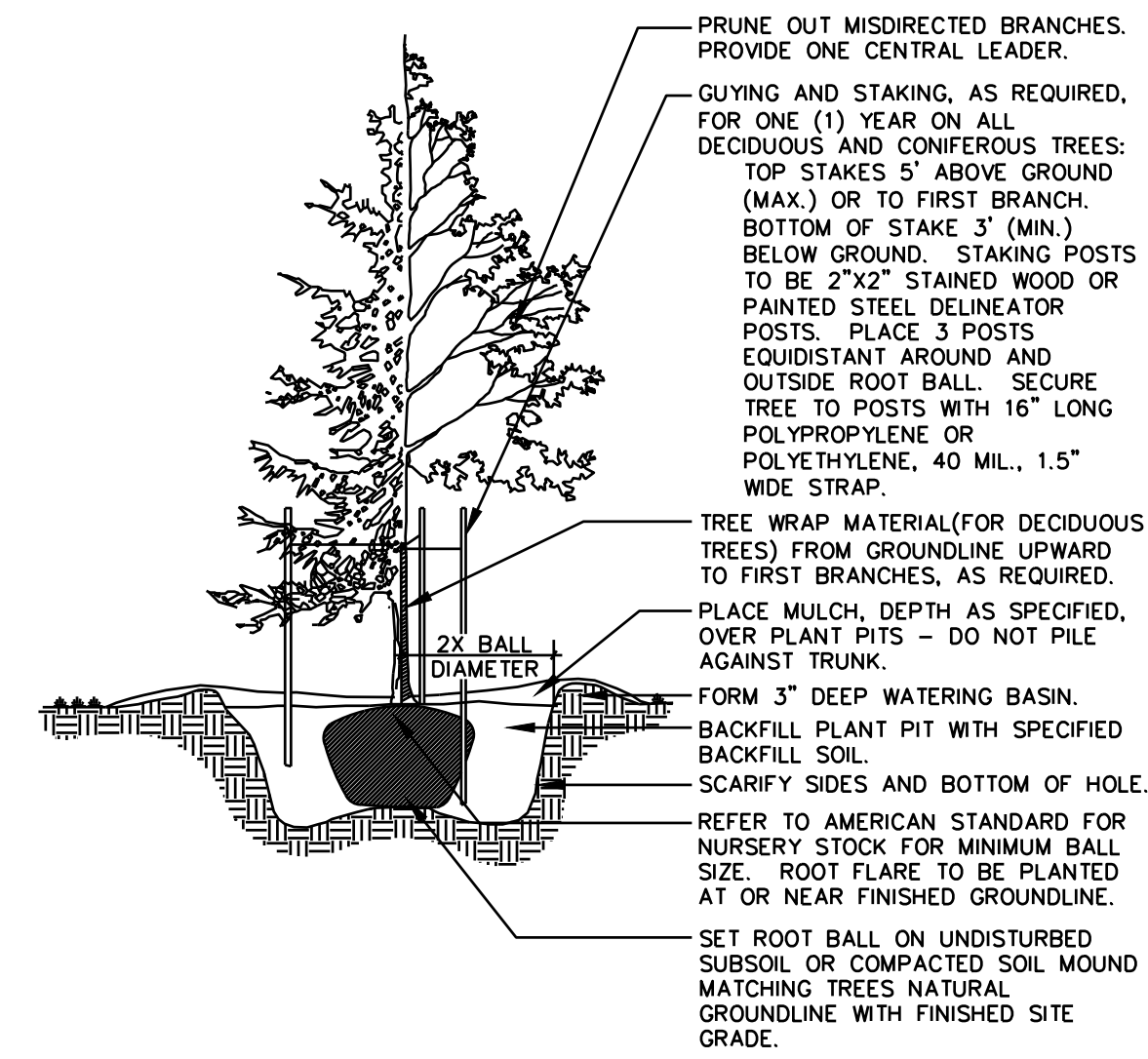
Westwood
 Phone (320) 253-9495 3701 12th Street North, Suite 206
 Fax (320) 358-2001 St. Cloud, MN 56303
 Toll Free (800) 270-9495 westwoodps.com
 Westwood Professional Services, Inc.

LANDSCAPE PLAN

SHEET NUMBER:
10 OF **11**
 DATE: 04/02/18

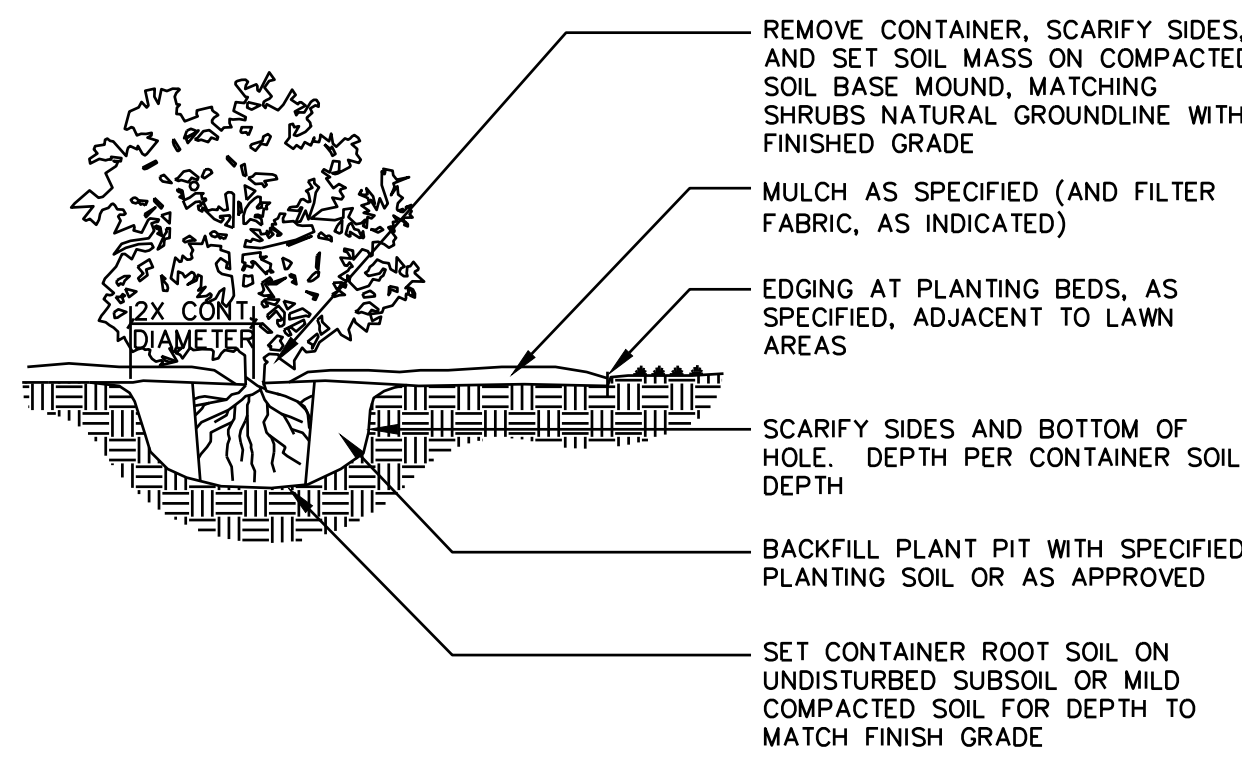
N:\012336\00\DWG\CTVIL\0012336\00\LO1.DWG

SOUTHVIEW HEIGHTS



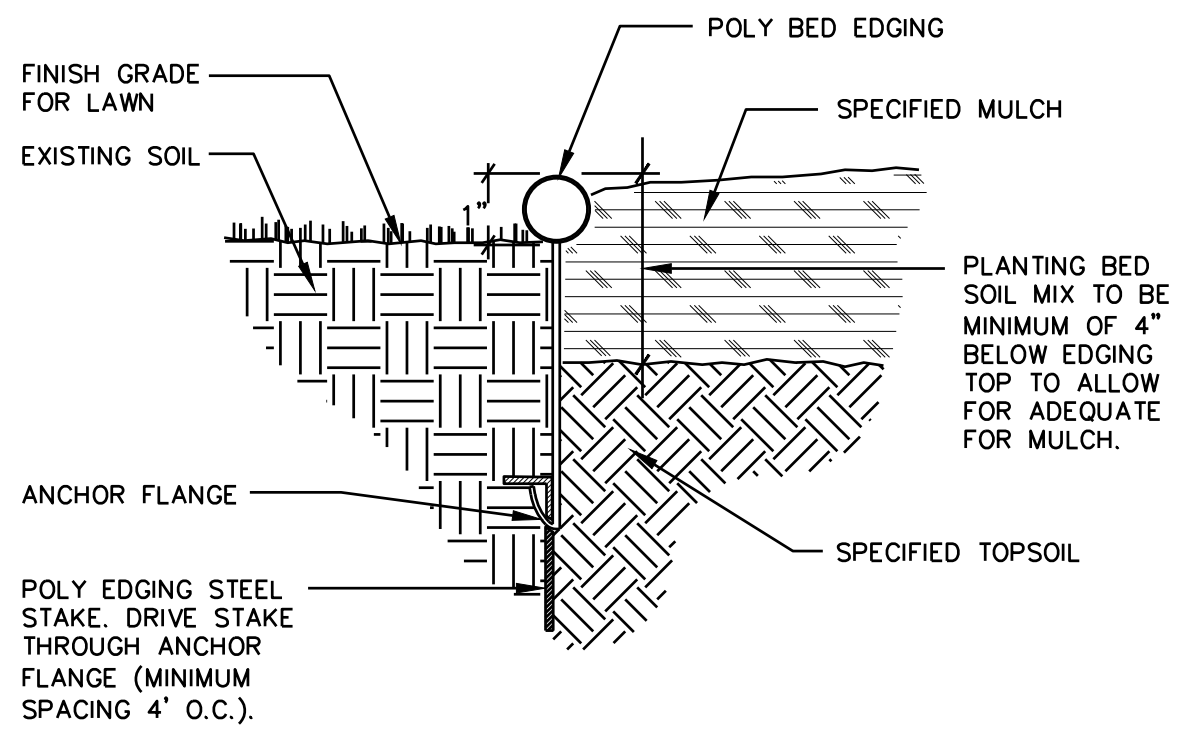
1 Tree Planting Detail

11 NOT TO SCALE



2 Shrub & Perennial Planting Detail

11 NOT TO SCALE



3 Poly Edge Detail

11 NOT TO SCALE

Planting Notes

- CONTRACTOR SHALL CONTACT COMMON GROUND ALLIANCE AT 811 OR CALL811.COM TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY PLANTS OR LANDSCAPE MATERIAL.
- ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
- NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- ALL SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR.
- CONTRACTOR SHALL PROVIDE TWO YEAR GUARANTEE OF ALL PLANT MATERIALS. THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECT'S OR OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
- ALL PLANTS TO BE SPECIMEN GRADE, MINNESOTA-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS:
 ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC.
 ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES.
 ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.
 ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.
 CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
- PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
- PLANTS TO BE INSTALLED AS PER MNLA & ANSI STANDARD PLANTING PRACTICES.
- PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. PROPERLY HEEL-IN MATERIALS IF NECESSARY; TEMPORARY ONLY.
- PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLAIR IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLAIR. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLAIR SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
- OPEN TOP OF BURLAP ON BB MATERIALS; REMOVE POT ON POTTED PLANTS; SPLIT AND BREAK APART PEAT POTS.
- PRUNE PLANTS AS NECESSARY - PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
- WRAP ALL SMOOTH-BARKED TREES - FASTEN TOP AND BOTTOM. REMOVE BY APRIL 1ST.
- STAKING OF TREES AS REQUIRED; REPOSITION, PLUMB AND STAKE IF NOT PLUMB AFTER ONE YEAR.
- THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.
- BACKFILL SOIL AND TOPSOIL TO ADHERE TO MN/DOT STANDARD SPECIFICATION 3877 (SELECT TOPSOIL BORROW) AND TO BE EXISTING TOP SOIL FROM SITE FREE OF ROOTS, ROCKS LARGER THAN ONE INCH, SUBSOIL DEBRIS, AND LARGE WEEDS UNLESS SPECIFIED OTHERWISE. MINIMUM 4" DEPTH TOPSOIL FOR ALL LAWN GRASS AREAS AND 12" DEPTH TOPSOIL FOR TREE, SHRUBS, AND PERENNIALS.
- MULCH TO BE AT ALL TREE, SHRUB, PERENNIAL, AND MAINTENANCE AREAS. TREE AND SHRUB PLANTING BEDS SHALL HAVE 4" DEPTH OF SHREDDED HARDWOOD MULCH. SHREDDED HARDWOOD MULCH TO BE USED AROUND ALL PLANTS WITHIN TURF AREAS. PERENNIAL AND ORNAMENTAL GRASS BEDS SHALL HAVE 2" DEPTH SHREDDED HARDWOOD MULCH. MULCH TO BE FREE OF DELETERIOUS MATERIAL AND COLORED RED, OR APPROVED EQUAL. MULCH AND FABRIC TO BE APPROVED BY OWNER PRIOR TO INSTALLATION. MULCH TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
- EDGING TO BE COMMERCIAL GRADE VALLEY-VIEW BLACK DIAMOND (OR EQUAL) POLY EDGING OR SPADED EDGE, AS INDICATED. POLY EDGING SHALL BE PLACED WITH SMOOTH CURVES AND STAKED WITH METAL SPIKES NO GREATER THAN 4 FOOT ON CENTER WITH BASE OF TOP BEAD AT GRADE, FOR MOWERS TO CUT ABOVE WITHOUT DAMAGE. UTILIZE CURBS AND SIDEWALKS FOR EDGING WHERE POSSIBLE. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. INDIVIDUAL TREE, SHRUB, OR RAIN-GARDEN BEDS TO BE SPADED EDGE, UNLESS NOTED OTHERWISE. EDGING TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).
- ALL DISTURBED AREAS TO BE SODDED, UNLESS OTHERWISE NOTED. PARKING LOT ISLANDS TO BE SODDED WITH SHREDDED HARDWOOD MULCH AROUND ALL TREES AND SHRUBS. SOD TO BE STANDARD MINNESOTA GROWN AND HARDY BLUEGRASS MIX, FREE OF LAWN WEEDS. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE DRAINAGE. SLOPES OF 3:1 OR GREATER SHALL BE STAKED. SEED AS SPECIFIED AND PER MN/DOT SPECIFICATIONS. IF NOT INDICATED ON LANDSCAPE PLAN, SEE EROSION CONTROL PLAN.
- PROVIDE IRRIGATION TO ALL PLANTED AREAS ON SITE. IRRIGATION SYSTEM TO BE DESIGN/BUILD BY LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR TO PROVIDE SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. CONTRACTOR TO PROVIDE OPERATION MANUALS, AS-BUILT PLANS, AND NORMAL PROGRAMMING. SYSTEM SHALL BE WINTERIZED AND HAVE SPRING STARTUP DURING FIRST YEAR OF OPERATION. SYSTEM SHALL HAVE ONE-YEAR WARRANTY ON ALL PARTS AND LABOR. ALL INFORMATION ABOUT INSTALLATION AND SCHEDULING CAN BE OBTAINED FROM THE GENERAL CONTRACTOR.
- CONTRACTOR SHALL PROVIDE NECESSARY WATERING OF PLANT MATERIALS UNTIL THE PLANT IS FULLY ESTABLISHED OR IRRIGATION SYSTEM IS OPERATIONAL. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR.
- REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
- REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.

Dry Swale/Pond Seed Mix - Infiltration Basins

33-262 Dry Swale / Pond		Rate (kg/ha)	Rate (lb/ac)	% of Mix (% by wt)	Seeds/ sq ft
big bluestem	<i>Andropogon gerardii</i>	1.68	1.50	3.40%	5.50
American slough grass	<i>Beckmannia syzigachne</i>	1.68	1.50	3.42%	27.60
fringed brome	<i>Bromus ciliatus</i>	1.68	1.50	3.40%	6.05
nodding wild rye	<i>Elymus canadensis</i>	4.48	4.00	9.09%	7.64
slender wheatgrass	<i>Elymus trachycaulus</i>	4.48	4.00	9.10%	10.15
Virginia wild rye	<i>Elymus virginicus</i>	2.80	2.50	5.67%	3.85
switchgrass	<i>Panicum virgatum</i>	0.45	0.40	0.91%	2.05
fowl bluegrass	<i>Poa palustris</i>	1.79	1.60	3.64%	76.50
Indian grass	<i>Sorghastrum nutans</i>	1.68	1.50	3.40%	6.60
Total Grasses		20.74	18.50	42.03%	145.94
marsh milkweed	<i>Asclepias incarnata</i>	0.07	0.06	0.13%	0.10
purple prairie clover	<i>Dalea purpurea</i>	0.10	0.09	0.21%	0.50
Canada tick trefoil	<i>Desmodium canadense</i>	0.10	0.09	0.21%	0.19
ox-eye	<i>Heliopsis helianthoides</i>	0.10	0.09	0.20%	0.20
black-eyed susan	<i>Rudbeckia hirta</i>	0.08	0.07	0.17%	2.49
blue vervain	<i>Verbena hastata</i>	0.11	0.10	0.23%	3.50
Total Forbs		0.56	0.50	1.15%	6.98
Oats or winter wheat (see note at beginning of list for recommended dates)		28.02	25.00	56.82%	11.14
Total Cover Crop		28.02	25.00	56.82%	11.14
Totals:		49.32	44.00	100.00%	164.06
Purpose:	Temporarily flooded swales in agricultural settings.				
Planting Area:	Tallgrass Aspen Parklands, Prairie Parkland, and Eastern Broadleaf Forest Provinces. Mn/DOT Districts 2(west), 3B, 4, Metro, 6, 7 & 8.				

N:\012336\00\DWG\CIVIL\0012336.DWG

SOUTHVIEW HEIGHTS

DESIGNED: _____
 CHECKED: JRW
 DRAWN: SYE
 FIELD CREW: _____
 FIELD WORK DATE: _____

INITIAL ISSUE: 02/13/18
 REVISIONS:
 04/02/18 - REVISED PER CITY COMMENTS

PREPARED FOR:
KJ DEVELOPMENT OF ST. JOSEPH, LLC
 140 75TH STREET NE
 RICE, MN 56367

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
 JEFFREY R. WESTENDORF
 DATE: 04/02/18 LICENSE NO. 44018

SOUTHVIEW HEIGHTS
 ST. JOSEPH, MN

Westwood
 Phone (320) 253-9495 3701 12th Street North, Suite 206
 Fax (320) 358-2001 St. Cloud, MN 56303
 Toll Free (800) 270-9495 westwoodps.com
 Westwood Professional Services, Inc.

LANDSCAPE DETAILS

SHEET NUMBER:
11 OF **11**
 DATE: 04/02/18