

VICINITY MAP



SITE DEVELOPMENT DOCUMENTS FOR 10500 SW MANHASSET DRIVE, TUALATIN, OR 97062 TAX LOT 200; MAP 2S1W22DD; LOCATED IN SECTION 22, TOWNSHIP 2 SOUTH, RANGE 1 WEST, OF THE WILLAMETTE MERIDIAN, IN THE CITY OF TUALATIN, COUNTY OF WASHINGTON, AND STATE OF OREGON

T: 503-443-3900 F: 503-443-3700

PROJECT TEAM

| ARCHITECT | LA |
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| MDG CONSULTING P.C. | - NC |
| 4875 SW GRIFFITH DR, STE 300 | 18 ⁻ |
| BEAVERTON, OR 97005 | BE |
| ATTN: TUAN LUU | AT |
| T: (503) 244-0552 | Т: |
| EMAIL: TUAN@MDGPC.COM | |
| CIVIL ENGINEER | GE |
| TM RIPPEY CONSULTING ENGINEERS, INC. | ĀC |
| 7650 SW BEVELAND RD, STE 100 | 74 |
| TIGARD, OR 97223 | PC |
| ATTN: CHRISTOPHER DESLAURIERS | AT |

240

ND SURVEYOR ORTHWEST SURVEYING, INC 315 NW 169TH PLACE, SUITE 2090 EAVERTON, OR 97006 TTN: CLINTON H STUBBS JR. (971) 848-2127

EOTECH ENGINEER GRA EARTH & ENVIRONMENTAL, INC 477 SW TECH CENTER DRIVE ORTLAND, OR 97223 ATTN: MIRIAM G. LIBERATORE, PE T: (503) 639-3400

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CIVIL NOTES

01.0 GENERAL

- 1. THESE NOTES SET MINIMUM STANDARDS FOR CONSTRUCTION. THE DRAWINGS GOVERN OVER THE GENERAL NOTES TO THE EXTENT SHOWN
- 2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON DRAWINGS AND IN FIELD. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH WORK
- 3. CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE FOR ALL NECESSARY TRAFFIC CONTROL PLANS, TEMPORARY SHORING AND OTHER INCIDENTAL WORK NEEDED FOR THE COMPLETION OF THE WORK
- 4. WHERE REFERENCE IS MADE TO IBC, ASTM, AISC, ACI OR OTHER STANDARDS, THE LATEST ISSUE AT THE BUILDING PERMIT DATE SHALL APPLY.
- 5. ALL WORK AND MATERIALS SHALL BE IN COMPLIANCE WITH THE PROJECT SPECIFICATIONS, THE "INTERNATIONAL BUILDING CODE" (IBC), THE INTERNATIONAL PLUMBING CODE (IPC) AND THE PROVISIONS OF "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION", 2018 EDITION, OREGON STATE HIGHWAY DIVISION (OSHD), AS AMENDED BY ALL OTHER STATE AND LOCAL CODES, JURISDICTIONS, PERMITS, AND BUILDING REQUIREMENTS THAT APPLY. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE CONSTRUCTION PERMITS AND SUBMIT TRAFFIC CONTROL PLANS PRIOR TO PROCEEDING WITH WORK.
- 6. EXISTING UTILITIES, SITE AND TOPOGRAPHIC INFORMATION SHOWN HEREON ARE BASED ON RECORD DRAWINGS PROVIDED BY OR MADE AVAILABLE BY THE OWNER. THE CONTRACTOR IS REQUIRED TO FIELD VERIFY THE LOCATION OF EXISTING FEATURES AND UTILITIES PRIOR TO CONSTRUCTION, AND SHALL ARRANGE FOR THE RELOCATION OF ANY IN CONFLICT WITH THE PROPOSED WORK. MINOR ADJUSTMENTS BASED ON FIELD CONDITIONS SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. LOCAL COUNTY AND CITY RECORD DRAWINGS SHOULD BE REVIEWED BY THE CONTRACTOR FOR THIS PURPOSE. THE EXISTENCE AND LOCATION OF EXISTING FEATURES ARE NOT GUARANTEED. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF INFORMATION OBTAINED FROM RECORD DRAWINGS OR INFORMATION PROVIDED BY OTHERS, IMPLIED OR OTHERWISE
- 7. ATTENTION EXCAVATORS: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH BY OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING (503) 232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CALL CENTER. YOU MUST NOTIFY THE CENTER AT LEAST 2 BUSINESS DAYS, BUT NOT MORE THAN 10 BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL (800) 332-2344.
- 8. CONTRACTOR SHALL CAREFULLY MAINTAIN BENCHMARKS, PROPERTY CORNERS, MONUMENTS, AND OTHER REFERENCE POINTS. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL PAY FOR THEIR REPLACEMENT BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS AND OTHER SUCH MONUMENTS.
- 9. CONTRACTOR TO COORDINATE AND PROVIDE INSTALLATION AS NECESSARY OF ALL PUBLIC AND PRIVATE UTILITIES FOR THIS PROJECT INCLUDING WATER SERVICE, SANITARY SEWER SERVICE, STORM DRAIN, ELECTRIC POWER, COMMUNICATIONS, CABLE TV, NATURAL GAS, STREET LIGHTS, ETC.
- 10. CONTRACTOR TO MAINTAIN ONE COMPLETE SET OF APPROVED DRAWINGS ON SITE FOR THE SOLE PURPOSE OF CONTRACTOR RECORDING AS-BUILT INSTALLATION OF IMPROVEMENTS. SUBMIT AS-BUILT PLANS TO OWNER.
- 11. ALL CONSTRUCTION ACTIVITY SHALL BE DONE IN A SAFE AND NEAT MANNER AND UNDER OBSERVATION BY CITY FORCES.
- 12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL CONSTRUCTION SAFETY, HEALTH AND OTHER RULES AND REGULATIONS FROM OSHA, DEQ, STATE, AND LOCAL REGULATING AGENCIES FOR SAFETY AND INSTALLATION OF THE WORK INCLUDING BUT NOT LIMITED TO SHORING, BRACING, ERECTION/ INSTALLATION, FALL PROTECTION, GUARDRAILS, ETC.
- 13. ALL SEWER TRENCH LINES AND EXCAVATIONS SHALL BE PROPERLY SHORED AND BRACED TO PREVENT CAVING. UNUSUALLY DEEP EXCAVATIONS MAY REQUIRE EXTRA SHORING AND BRACING. ALL SHEETING, SHORING, AND BRACING OF TRENCHES SHALL CONFORM TO OREGON OCCUPATIONAL SAFETY AND HEALTH DIVISION (OSHA) REGULATIONS AND THE CITY OR COUNTY STANDARD CONSTRUCTION SPECIFICATIONS.
- 14. ALL UNDERGROUND UTILITIES SHALL BE INSTALLED PRIOR TO
- CONSTRUCTION OF CURBS, RETAINING WALLS, OR PAVEMENT. 15. ALL WATER AND SEWERAGE APPURTENANCES SHALL CONFORM TO APWA, OREGON CHAPTER, "STANDARDS SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION"; THE APPROVED CONSTRUCTION DRAWINGS; AND CITY OF TUALATIN REQUIREMENTS
- 16. ELEVATIONS AND CONTOURS ARE BASED ON WASHINGTON COUNTY BENCHMARK NO. 962. THE BENCHMARK IS A BRASS DISK AT THE NW CORNER OF SW TUALATIN SHERWOOD ROAD AND SW CIPOLE ROAD. IT HAS AN ELEVATION OF 189.81 FEET ON THE NGVD 1929 VERTICAL DATUM.
- 17. DETAILS SHOWN ON THE DRAWINGS ARE INTENDED TO APPLY AT ALL SIMILAR CONDITIONS AND LOCATIONS. 18. DO NOT SCALE INFORMATION FROM DRAWINGS.
- 19. CONTRACTOR TO REMOVE FROM SITE EXCESS SOIL OR OTHER
- MATERIALS NOT REUSABLE FOR THIS PROJECT, AND COMPLY WITH ALL RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL REPORT. 20. APPROPRIATE BENCHING OF FILLS IS REQUIRED FOR FILLS OVER 5 FEET IN HEIGHT ON SLOPES IN EXCESS OF 5 HORIZONTAL TO 1
- VERTICAL. THE GEOTECHNICAL ENGINEER SHALL INSPECT BENCHES PRIOR TO FILL PLACEMENT.
- 21. CUT AND FILL SLOPES SHALL BE PROTECTED FROM EROSION. SUCH CONTROL MAY CONSIST OF APPROPRIATE REVEGETATION OR OTHER ACCEPTABLE MEANS AND METHODS. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTHWORK OR SITE STRIPPING. 22. MATERIAL IN SOFT SPOTS WITHIN 5 FEET OF RIGHT-OF-WAYS,
- PAVEMENTS OR BUILDINGS SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM SUBGRADE AND SHALL BE REPLACED WITH 1-1/2"-0" CRUSHED ROCK COMPACTED TO 95% PER ASTM D1557.
- 23. THE NATIVE SUBGRADE SURFACE SHALL BE APPROVED BEFORE SCARIFYING OR PLACING ANY FILL OR BASE ROCK BY THE SOILS ENGINEER. THE UPPER 8 INCHES OF NATIVE SUBGRADE IS TO BE SCARIFIED, DRIED AND RECOMPACTED TO 90% MAXIMUM DRY DENSITY PER ASTM D698. PLACE GEOTEXTILE FABRIC (MIRAFI 500X, PROPEX GEOTEX 200ST, CONTECH C200 OR EQUAL) BELOW ALL VEHICULAR PAVEMENT. FOR WET WEATHER CONSTRUCTION (AS DETERMINED BY THE GEOTECHNICAL ENGINEER) A WORKING BLANKET OF PIT RUN OR CRUSHED ROCK IS TO BE LAID OVER GEOTEXTILE FABRIC. ON-SITE COMPACTION TESTS AND DEFLECTION TEST(S) PERFORMED WITH A 50,000 LB. VEHICLE MUST BE PERFORMED AND WITNESSED BY THE GEOTECHNICAL ENGINEER. NO DEFLECTION IS ALLOWED AND ALL BUILDING AND PAVEMENT AREAS MUST BE PROOF-ROLLED, DURING WET WEATHER CONSTRUCTION (AS DETERMINED BY THE SOILS ENGINEER), PROVIDE THE PROOF-ROLL TEST OVER THE BASE ROCK SURFACES PRIOR TO PLACEMENT OF ANY PAVEMENT.
- 24. CRUSHED ROCK BASE MATERIAL AND PIPE ZONE MATERIAL SHALL BE CRUSHED ROCK CONFORMING TO OREGON DEPARTMENT OF TRANSPORTATION (ODOT) SECTION 00640 AND 00641 AND BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D1557.
- 25. 3/4" 0" CRUSHED ROCK PIPE ZONE AND BACKFILL MATERIAL IS REQUIRED FOR ALL UTILITY LINES, CONDUITS AND LEVELING COURSES. REFER TO THE TYPICAL UTILITY CONDUIT TRENCH AND

PAVEMENT DETAILS.

- 26. ASPHALTIC CONCRETE (A.C.) PAVEMENT SHALL BE A LEVEL 4 HMAC SUPER PAVE WITH AN ASPHALT CONTENT PER OREGON DOT CLASSIFICATION AND APPROVED JMFM FOR ALL LIFTS. PAVEMENT SHALL BE PLACED ONLY ON DRY, CLEAN AND PROPERLY PREPARED SURFACES, AND WHEN CONDITIONS MEET THE SPECIFICATIONS AS SET FORTH IN THE MOST RECENT EDITION OF THE OREGON DOT SPECIFICATIONS. ALL NEW PAVEMENT AREAS SHALL CONFORM TO THE TYPICAL PAVEMENT SECTION DETAIL. ALL A.C. PAVEMENT TO BE COMPACTED TO 91% OF MAXIMUM DENSITY PER ASTM D2041 FOR FIRST LIFTS LESS THAN 3-INCHES AND 92% COMPACTION SHALL BE REQUIRED FOR SUBSEQUENT LIFTS.
- 27. ALL JOINTS BETWEEN A.C AND CONCRETE STRUCTURES MUST BE TACKED WITH BITUMASTIC. NO EXCEPTIONS ALLOWED. 28. ALL PORTLAND CEMENT CONCRETE PAVEMENT SHALL HAVE A 28 DAY MINIMUM ULTIMATE STRENGTH OF 4000 PSI. PROVIDE A MINIMUM OF
- (4) TEST CYLINDERS IN ACCORDANCE WITH CURRENT IBC AT EACH POUR
- A. MINIMUM MIX REQUIREMENTS: I. CEMENT CONTENT PER YARD: 5 SACKS. II. MAXIMUM WATER/CEMENT RATIO: 0.45. FLY ASH MEETING ASTM C618 AND WITH LOSS ON IGNITION LESS THAN 3% MAY BE ADDED
- TO THE CEMENT, BUT NOT MORE THAN 15% BY WEIGHT. III. SLUMP: 3 INCH TO 4 INCH. DEVIATING FROM DESIGN SLUMP +1/2 INCH TO -1 INCH. WHEN CONCRETE IS TO BE PUMPED, ADD PLASTICIZERS MEETING ASTM C494 AND PROVIDE A NEW MIX DESIGN. DO NOT ADD WATER.
- IV. ADMIX: PROVIDE WATER REDUCING ADMIX (MASTER BUILDERS) AND REDUCE WATER USED BY 10% MINIMUM FOR ALL SLABS.
- V. AIR ENTRAINMENT: PER ACI 301 AND 306 AT ALL EXTERIOR SLABS AND FLAT WORK, 5.5% AIR MINIMUM.
- VI. ALL ADMIXTURES TO BE COMPATIBLE FROM SAME MANUFACTURER B. PLACE AND CURE ALL CONCRETE PER ACI CODES AND STANDARDS. C. SLEEVES, PIPES OR CONDUITS OF ALUMINUM SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE UNLESS EFFECTIVELY COATED D. PROVIDE CONTROL JOINTS IN ALL SLABS ON GRADE AS SHOWN ON
- PLANS. IN AREAS WHERE JOINTS ARE NOT SHOWN, INSTALL IN SQUARE PATTERN AT 15' ON CENTER EACH WAY MAXIMUM. INSTALL JOINTS AT ALL RE-ENTRANT CORNERS.
- E. PROVIDE 1/4" PREMOLDED EXPANSION JOINT MATERIAL BETWEEN SLABS AND WALLS THAT ARE NOT DOWELED TOGETHER, AND AROUND COLUMNS THAT DO NOT HAVE SLAB BLOCKOUTS.
- 31. ON-SITE HANDICAP/DISABILITY ACCESS ROUTES SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA), STATE AND LOCAL REGULATIONS. NOTIFY ARCHITECT AND ENGINEER PRIOR TO INSTALLING FINISH PAVEMENT IN CONFLICT WITH ADA REQUIREMENTS. CONTRACTOR TO VERIFY GRADING OF ADA PATHS OF TRAVEL AND PARKING STALLS AND CONTACT ENGINEER OF RECORD FOR ADDITION WORK IF EXISTING GRADING IS FOUND NOT TO MEET CODE REQUIREMENTS. IN GENERAL:
- A. MAXIMUM CROSS SLOPE OF ANY PAVEMENT PERPENDICULAR TO DIRECTION OF TRAVEL IS 2.0%.
- B. MAXIMUM SLOPE OF WALKWAYS IN DIRECTION OF TRAVEL IS 5.0%. C. FOR RAMPS, THE MAXIMUM SLOPE IS 8.33% AND MAXIMUM RISE BETWEEN LANDINGS IS 30 INCHES, HANDRAILS ARE REQUIRED EACH SIDE OF ALL RAMPS WITH SLOPE GREATER THAN 5%.
- D. MAXIMUM SLOPE OF CURB RAMPS AND WINGS OF CURB RAMPS IS 8.33%. THE MAXIMUM LENGTH OF A CURB RAMP IS 6 FEET.
- E. PROVIDE FINISH PAVEMENT SURFACE TEXTURES IN ACCORDANCE WITH ADA.
- F. STRAIGHT GRADE FINISH PAVEMENT AND TOP OF CURB ELEVATIONS BETWEEN GIVEN ELEVATION POINTS. BLEND FINISH GRADES AT GRADE BREAKS.
- 32. PAVEMENT MARKINGS ON AC PAVEMENT SHALL BE MPI #32 ALKYD PAINT. INSTALL PER MANUFACTURERS RECOMMENDATIONS. VERIFY
- PAINT LOCATIONS, COLORS AND STENCILS WITH ARCHITECT. 33. ADA STALL PAVEMENT STENCILS SHALL BE THERMOPLASTIC STENCIL INSTALLED PER MANUFACTURES RECOMMENDATIONS.

02.0 CLEARING AND GRUBBING

- 1. ALL CONSTRUCTION AND MATERIALS WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THESE PLANS AND THE APPLICABLE REQUIREMENTS OF CITY OF TUALATIN, STATE OF OREGON AND FEDERAL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES.
- NOTIFY ARCHITECT 2 BUSINESS DAYS BEFORE COMMENCING WORK. CONTRACTOR SHALL REMOVE ALL TREES, SHRUBS, RUBBISH, AND MAN-MADE STRUCTURES INCLUDING BUT NOT LIMITED TO CONCRETE SLABS, WALLS, VAULTS, FOOTINGS, ASPHALTIC PAVED SURFACES, GRAVELED AREAS, SHED OR OTHER FREE-STANDING BUILDINGS (CONSTRUCTED OF WOOD, CONCRETE, METAL, ETC.) FOUNDATIONS, FENCES, RAILINGS, MACHINERY, ETC. WITHIN THE CLEARING LIMITS. THE ITEMS LISTED ABOVE SHALL BE DISPOSED OF OFF-SITE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONFIRM THE NUMBER AND TYPE OF STRUCTURES TO BE REMOVED. CONTRACTOR SHALL
- OBTAIN ALL NECESSARY DEMOLITION AND WORK PERMITS. ALL BURIED STRUCTURES (I.E. TANKS, LEACH LINES, DRAIN TILE, AND PIPES) NOT DESIGNATED TO REMAIN ON THE SITE, SHALL BE REMOVED AND THE RESULTING EXCAVATIONS SHALL BE PROPERLY INSPECTED, BACKFILLED AND COMPACTED PRIOR TO ANY GRADING OR FILLING OPERATIONS. THIS IS TO INCLUDE STUMPS AND ROOTBALLS OF TREES TO BE REMOVED FROM THE SITE. NOTIFY CITY FOR INSPECTIONS AS REQUIRED.
- THE AREA OF THE SITE DESIGNATED ON THE PLAN TO BE REGRADED OR PAVED SHALL BE STRIPPED TO REMOVE ALL ORGANIC MATERIAL DOWN TO FIRM SUBGRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING SUBGRADE SOILS FROM OVERWORKING AND PROVIDE REPAIR TO DAMAGED SUBGRADE AT NO ADDITIONAL COST TO THE OWNER.
- 6. ALL UNSUITABLE MATERIAL (SOIL AND VEGETATION) REMOVED DURING THE CLEARING AND GRUBBING OPERATIONS SHALL BE REMOVED BY THE CONTRACTOR AND LEGALLY DISPOSED OF IN A SUITABLE LOCATION.
- 7. EXCAVATORS MUST COMPLY WITH ALL PROVISIONS OF ORS 757.541 TO 757.571 INCLUDING NOTIFICATION OF ALL OWNERS OF UNDERGROUND FACILITIES AT USA LOCATES (681-7044), AT LEAST 48 BUSINESS HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS BEFORE COMMENCING AN EXCAVATION.
- 8. ALL EMBANKMENTS REQUIRED SHALL BE STRUCTURAL FILL MEETING THE REQUIREMENTS AND SPECIFICATIONS OF IBC CHAPTER 18.
- 9. ALL EXCESS MATERIAL NOT UTILIZED ON-SITE SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR.
- 10. TREES NOT DESIGNATED TO BE REMOVED BY THE ARCHITECT SHALL BE PROTECTED AT ALL TIMES. 11. SAWCUT STRAIGHT LINES TO MATCH EXISTING PAVEMENT WITH THE
- NEW PAVEMENT.
- 12. CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE TRAFFIC CONTROL ALONG THE EXISTING ROADS AS REQUIRED BY THE CITY OF TUALATIN.

03.0 PRIVATE UTILITIES

- 1. CONTRACTOR TO PROVIDE UTILITY SUBMITTALS FOR REVIEW PRIOR TO INSTALLATION OF ALL PROPOSED UTILITY PIPES, CONDUITS, MANHOLES, BENDS/FITTINGS AND ALL OTHER SYSTEM APPURTENANCES.
- 2. SANITARY SEWER, STORM DRAIN AND WATER LINES IN PRIVATE PROPERTY SHALL BE PRIVATELY OWNED, MAINTAINED AND OPERATED. PROVIDE TRACER WIRE AND WARNING TAPE FOR ALL PLASTIC UTILITY LINES.

- 3. ALL PRIVATE CATCH BASINS, AREA DRAINS, STORM DRAIN PIPE, SANITARY SEWER PIPE AND WATER PIPE AND APPURTENANCES SHALL MEET THE REQUIREMENTS OF THE LATEST INTERNATIONAL PLUMBING
- CODE AS APPLICABLE. 4. ALL CONNECTIONS TO EXISTING PUBLIC STORM SEWER, SANITARY SEWER AND WATER MAINS REQUIRE ISSUANCE OF A PUBLIC WORKS PERMIT AND INSPECTION BY THE CITY OF TUALATIN AND THE WATER DISTRICT AS APPLICABLE.
- 5. PRIVATE SANITARY SEWER LATERALS SHALL COMPLY WITH THE REFERENCED PUBLIC STANDARDS AND DRAWINGS FOR PUBLIC SANITARY SEWER. LAY THE 'T' AT A 2% SLOPE
- 6. CAST IRON SANITARY OR STORM DRAIN PIPE AND JOINTS SHALL BE HUBLESS, SERVICE WEIGHT, AND MEET THE REQUIREMENTS OF CISPI 301. JOINTS SHALL BE MECHANICAL CLAMP RING TYPE, STAINLESS STEEL EXPANDING AND CONTRACTING SLEEVES WITH FULL CIRCLE NEOPRENE RIBBED GASKETS FOR POSITIVE SEAL. COUPLINGS AND SHIELDS TO BEAR THE MANUFACTURER'S REGISTERED INSIGNIA. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
- 7. PVC SANITARY SEWER OR STORM DRAIN PIPE SHALL BE ASTM D3034, SDR-35. COMPATIBLE ASTM D3034 FITTINGS MUST BE USED WITH ASTM D3034 PIPE. ALL ASTM D3034 PIPE USED MUST BE OF WATER-TIGHT JOINTS AND TESTED FOR ROUNDNESS AFTER BACKFILL. PROVIDE PRESSURE TEST. PROVIDE TV VIDEO TAPE IF SO REQUIRED BY THE JURISDICTION HAVING AUTHORITY.
- 8. PERFORATED PVC SEPTIC DRAINFIELD PIPE SHALL BE PER ASTM D2729 WITH SOLVENT WELD JOINTS.
- 9. PVC SANITARY SEWER PRESSURE (FORCE MAIN) PIPE SHALL BE SCHEDULE 40 PER ASTM D1784 WITH SOLVENT WELD JOINTS PER ASTM D1785.
- 10. HIGH DENSITY POLYETHYLENE (HDPE) STORM DRAIN PIPE AND ASSOCIATED HDPE FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM D 3350 OR ASTM 1248, TYPE III, CLASS C, CATEGORY 4, GRADE P33. 4 INCH TO 10 INCH PIPE SHALL MEET AASHTO M252 TYPE S; 12 INCH TO 36 INCH PIPE SHALL MEET AASHTO M294 TYPE S; 42 INCH TO 48 INCH SHALL MEET AASHTO MP6-95, TYPE S; AND 54 INCH TO 60 INCH SHALL MEET AASHTO M294, TYPE S. JOINTS SHALL BE BELL AND SPIGOT COUPLINGS, OR EQUIVALENT, AND CONFORM TO ASTM D3212. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D2321 WITH EXCEPTION THAT MINIMUM COVER IN TRAFFIC AREAS SHALL BE 18 INCHES
- 11. ABS SCHEDULE 40 SOLID WALL PLASTIC PIPE AND FITTINGS MEETING REQUIREMENTS OF ASTM D 2661 JOINED WITH PIPE CEMENT MEETING REQUIREMENTS OF ASTM 2235.
- 12. DUCTILE IRON PIPE: AWWA C-151, CLASS 52, WITH GASKETED BELL & SPIGOT JOINTS, SEAL COATED PER AWWA C-104.
- 13. GALVANIZED STEEL PIPE SHALL BE OF SCHEDULE 40 CONFORMING TO ASTM A120 AND AWWA C800 ZINC-COATED INSIDE AND OUTSIDE BY THE HOT-DIP PROCESS CONFORMING TO ASTM B6 AND ASTM A120.
- 14. REINFORCED CONCRETE STORM DRAIN PIPE AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C76, CLASS IV. PROVIDE WATER TIGHT JOINTS USING RUBBER RING GASKETS.
- 15. BURIED EXTERIOR PERFORATED FOUNDATION DRAIN PIPE WITH CONTINUOUS FILTER FABRIC SOCK SHALL BE "ADS DRAINGUARD" OR PVC SCHED 40 PERFORATED PIPE WITH SOLVENT WELD JOINTS. INSTALL DRAIN PIPE AT 0.5% SLOPE UP FROM BOTTOM OF FOOTING IN EACH DIRECTION AROUND THE BLDG FROM THE BACKWATER VALVE(S) CONNECTION LOCATION(S) TO THE SITE STORM DRAINAGE SYSTEM. PROVIDE FILTER FABRIC WRAP AROUND A 24 INCH WIDE X 24 INCH HIGH (MIN.) CLEAN DRAIN ROCK BACKFILL SECTION AT PERIMETER OF BUILDING FOUNDATION. LAP FILTER FABRIC 12 INCHES OVER TOP OF DRAIN ROCK SECTION. TOP OF DRAIN ROCK TO BE 9 INCHES BELOW FINISH GRADE BESIDE BUILDING. SEE DWGS FOR
- TYPICAL FNDN DRAIN INSTALLATION DETAIL. 16. ABS OR PVC FOUNDATION DRAIN BACKWATER VALVES SHALL BE HORIZONTAL TYPE SIMILAR TO ASME A112.14.1, WITH REMOVABLE COVER AND SWING CHECK VALVE WITH GASKET. SEE DWGS FOR INSTALLATION DETAIL.
- 17. PERFORATED DRAIN PIPE LOCATED UNDER BUILDING SLAB SHALL BE PVC, SCHED 40 PERFORATED DRAIN PIPE PER ASTM D2729 WITH SOLVENT WELD JOINTS AND CONTINUOUS FILTER FABRIC SOCK COVER.
- 18. GEOCOMPOSITE DRAINAGE FABRIC SHALL BE "AQUADRAIN 15X, "MIRADRAIN 6200XL", OR ENGINEER PRE-APPROVED EQUAL.
- 19. AREA DRAINS IN LANDSCAPE AREAS SHALL BE 15"X15" TURF & LANDSCAPE AREA DRAINS MANUFACTURED BY THE 'LYNCH CO." WITH 4 INCH DIAMETER TRAPPED NO-HUB CONNECTION OUTLETS, EXTENSIONS AND GRATES WITH BARS AT 1 -1/4 INCH ON CENTER FOR COMPLETE ASSEMBLY.
- 20. EXTERIOR AREA DRAINS IN CONCRETE PAVEMENT AREAS SHALL BE "SMITH" FLOOR DRAINS WITH 12 INCH DIAMETER TOPS, DEEP BODY SEDIMENT BUCKETS, 4 INCH DIAMETER TRAPPED NO-HUB CONNECTION OUTLETS, EXTENSIONS AND GRATES FOR COMPLETE ASSEMBLY.
- 21. EXTERIOR CLEANOUTS IN WALKWAYS SHALL BE J.R. SMITH 4023-U WITH HEAVY DUTY NICKEL BRONZE TOP, TAPER HEAD, ABS PLUG AND TOP SECURED WITH VANDAL PROOF SCREWS, FLUSH AT FINISH GRADE.
- 22. ALL SEWER LINES SHALL BE LAID IN A STRAIGHT ALIGNMENT AND IN A UNIFORM GRADE BETWEEN MANHOLES, CLEANOUTS OR OTHER STRUCTURES.
- 23. DUCTILE IRON WATER PIPE SHALL BE AWWA C-151, CLASS 52 WITH CEMENT MORTAR LINING AND SEAL COATED PER AWWA C-104. FITTINGS SHALL BE PER AWWA C-110 AND GASKETS PER AWWA C-111;
- JOINT RESTRAINING DEVICES PER EBAA IRON, INC. 24. PVC WATER PIPE (4" TO 12" DIAMETER) SHALL BE AWWA C900, CLASS 150. ELASTOMERIC JOINTS SHALL BE PER ASTM D3139, RUBBER GASKETS PER ASTM F477 AND ASTM D1869. INSTALLATION SHALL BE PER AWWA C605 AND PIPE MANUFACTURER'S PRINTED RECOMMENDATIONS AND INSTRUCTIONS. JOINT RESTRAINING DEVICES PER EBAA IRON, INC.
- 25. PVC WATER PIPE (3/4" TO 2-1/2" DIAMETER) SHALL CONFORM WITH ASTM D2241, 160 PSI PIPE. JOINTS SHALL BE SOLVENT CEMENT WELDED CONFORMING WITH ASTM D2672 OR ASTM 03036. SOLVENT CEMENT SHALL CONFORM TO ASTM D 2564.
- 26. COPPER WATER PIPE (3/4 INCH TO 2-1/2 INCH DIAMETER) SHALL BE TYPE 'K' HARD TEMPERED COPPER PER ANSI H23.1 WITH WROUGHT COPPER SOLDER JOINT FITTINGS PER ANSI B16.22.
- 27. INSTALL ALL PLASTIC PIPE AND FITTINGS IN ACCORDANCE WITH ASTM D2321.
- 28. PROVIDE A DOUBLE CHECK VALVE ASSEMBLY IN AN ACCESSIBLE ROOM, CONCRETE BOX OR VAULT WITH OPENABLE LID(S) FOR ALL WATER SERVICE LINES 1 INCH AND LARGER. PROVIDE DETECTOR CHECK PLUMBING AND METER AT DOUBLE CHECK ASSEMBLIES FOR FIRE SERVICE LINES.
- 29. PROVIDE A PRESSURE REDUCING VALVE ASSEMBLY (INCLUDING GATE VALVES IMMEDIATELY UP AND DOWNSTREAM) IN AN ACCESSIBLE ROOM, CONCRETE BOX OR VAULT WITH OPENABLE LID(S) FOR ALL WATER SERVICE LINES WHERE MAXIMUM STATIC PRESSURE IS OR EXCEEDS EIGHTY (80) PSI. VALVES SHALL BE SET TO SUSTAIN A MAXIMUM PRESSURE OF 60 PSI AND SHALL BE OF A PRESSURE RATING TO ACCOMMODATE THE UPSTREAM PRESSURE INCLUDING AN ALLOWANCE OF 100 PSI FOR SURGE. VALVE SHALL BE CLAYTON 90-01 SERIES AS MANUFACTURED BY CAL-VAL CO., NEWPORT BEACH, CA OR WATER DISTRICT PRE-APPROVED.
- 30. ALL ELBOWS, BENDS, TEES, CROSSES AND DEAD ENDS ON WATER PIPES 3 INCHES AND LARGER IN SIZE SHALL BE PROVIDED WITH CONCRETE THRUST BLOCKS.
- 31. A MINIMUM DEPTH OF 30 INCHES IN PRIVATE LANDSCAPE AREAS AND 36 INCHES IN PRIVATE STREETS FROM FINISHED GRADE TO THE TOP OF WATER PIPE IS REQUIRED.
- 32. BLOW-OFF ASSEMBLIES ARE REQUIRED AT ALL DEAD-END PRIVATE WATER LINES.

- 33. ALL PRIVATE WATER LINES SHALL BE FLUSHED, PRESSURE TESTED
- AND DISINFECTED PER AWWA C600, SECTION 4 AND AWWA C601. 34. ALL WATER LINE CROSSINGS WITH SANITARY SEWER SHALL COMPLY WITH APPLICABLE DEQ AND OREGON STATE HEALTH DIVISION RULES AND REGULATIONS RELATING TO VERTICAL AND HORIZONTAL SEPARATION.
- 35. ALL NEW AND EXISTING MANHOLE RIMS, CATCH BASIN RIMS, CLEAN-OUTS AND OTHER INCIDENTAL STRUCTURES SHALL BE LOCATED AND ADJUSTED TO FINISH GRADE OR AS OTHERWISE INDICATED ON THE DRAWINGS.
- 36. PRECAST CONCRETE UTILITY VAULTS: A. REINFORCED PRECAST CONCRETE UTILITY VAULTS SHALL BE APPROVED BY THE OREGON STATE PLUMBING BOARD. PROVIDE COMPLETE ASSEMBLIES FOR INSTALLATION INCLUDING INLET AND OUTLET PIPING.
- B. GRADE RINGS: PROVIDE MANUFACTURER'S STANDARD PRECAST CONCRETE GRADE RINGS FOR ADJUSTING VAULT LIDS TO FINISH GRADE.
- C. MINIMUM STRUCTURAL REQUIREMENTS:
- I. CONCRETE: 28 DAY COMPRESSIVE STRENGTH FC = 4500 PSI II. REBAR: ASTM A-615 GRADE 60.
- III. MESH: ASTM A185 GRADE 65. IV. STEEL: ASTM A36 GRADE 36.
- V. GALVANIZING: ASTM A-123-89 AND A-153-87 (HOT DIPPED). VI. STEEL DESIGN: AISC MANUAL OF STEEL CONSTRUCTION, 9Th EDITION.
- VII. CONCRETE DESIGN: ACI-318-89 BUILDING CODE.
- ASTM C-857 MINIMUM STRUCTURAL DESIGN. • LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY
- STRUCTURES. VIII. LOADS: AASHTO H-20 16 KIP WHEEL LOAD WITH 30% IMPACT (10"X20" FOOTPRINT)
- AASHTO LIVE LOAD SURCHARGE (2' SOIL) 8' DEPTH
- EFFECTIVE SOIL PRESSURE ABOVE WATER TABLE 80 P.C.F
- EFFECTIVE SOIL PRESSURE ABOVE WATER TABLE 45 P.C.F IX. SOIL COVER: 1'-6" MINIMUM WITH WATER TABLE 3'-0" BELOW FINISHED GRADE.
- 5'0" MAXIMUM WITH WATER TABLE 3'-0" BELOW FINISHED GRADE 0' MINIMUM WITH WATER TABLE BELOW BOTTOM OF VAULT.
- 5'-0" MAXIMUM WITH WATER TABLE BELOW BOTTOM OF VAULT. D. ACCEPTABLE MANUFACTURERS:
- I. UTILITY VAULT COMPANY, WILSONVILLE, OREGON II. ENGINEER PRE-APPROVED EQUAL MEETING SAME OR BETTER REQUIREMENTS.

12.0 CONSTRUCTION OBSERVATION, INSPECTION AND TESTING

- 12.1 GENERAL
- 1. INDEPENDENT TESTING LAB TO BE RETAINED BY OWNER TO PROVIDE INSPECTIONS AND SPECIAL INSPECTIONS AS DESCRIBED HEREIN. 2. CONTRACTOR IS RESPONSIBLE TO COORDINATE AND PROVIDE ON
- SITE ACCESS TO ALL REQUIRED INSPECTIONS AND NOTIFY GEOTECHNICAL ENGINEER AND TESTING LABS IN TIME TO MAKE SUCH INSPECTIONS AND ALL NECESSARY REINSPECTIONS. 3. CONTRACTOR: DO NOT COVER WORK REQUIRED TO BE INSPECTED
- OR REINSPECTED PRIOR TO INSPECTION BEING MADE. IF WORK IS COVERED, UNCOVER AS NECESSARY.
- 4. INSPECTORS SHALL PROMPTLY NOTIFY THE CONTRACTOR PRIOR TO LEAVING THE SITE AND OWNER'S REPRESENTATIVE OF SUBSTANDARD WORK AND PROVIDE A COPY OF ALL REPORTS TO THE OWNER, ARCHITECT, ENGINEER, CONTRACTOR, AND BUILDING OFFICIAL
- 5. CONTRACTOR TO NOTIFY CIVIL ENGINEER WHEN UTILITY WORK BEGINS AND FOR OBSERVATION OF BASE ROCK PRIOR TO PLACING FINISH CURBS OR PAVEMENTS.

12.2 SPECIAL INSPECTIONS

- 1. REQUIRED SPECIAL INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT SPECIAL INSPECTOR PER SECTION 1701 OF THE INTERNATIONAL BUILDING CODE (IBC) FOR THE FOLLOWING: A. SOILS:
- I. FOUNDATION EXCAVATION TO BE OBSERVED BY OWNER'S GEOTECHNICAL ENGINEER FOR FIELD VERIFYING FOUNDATION DRAINAGE AND DEWATERING RECOMMENDATIONS.
- II. NATIVE SUBGRADE SURFACE TO BE PROOF-ROLLED AND OBSERVED BY THE OWNER'S GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE PRIOR TO PLACEMENT OF ALL FILL OR BASE ROCK MATERIALS UNDER OR WITHIN 5 FEET OF ALL PAVEMENT AND BUILDING AREAS. DURING WET WEATHER CONSTRUCTION WHEN PROOF-ROLL OF NATIVE SUBGRADE MAY NOT BE APPROPRIATE (AS DETERMINED BY GEOTECHNICAL ENGINEER), PROVIDE PROOF-ROLL OF ALL BASE ROCK SURFACES PRIOR TO PLACEMENT OF ANY FINISH PAVEMENTS.
- III. DURING THE PLACEMENT OF ALL FILL, INCLUDING TRENCH BACKFILL AND BASE BELOW PAVEMENTS AND BUILDINGS, GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE TO VERIFY THAT MINIMUM COMPACTION REQUIREMENTS ARE MET. PROVIDE TEST FOR EACH 40 CUBIC YARDS PLACED.
- IV. GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE TO OBSERVE ALL PROOF ROLLS.

CONTACT:CARLSON TESTING PO BOX 23814 TIGARD, OREGON 97281 (503) 684-3460

B. PAVEMENTS:

- I. VERIFY COMPACTION OF ASPHALT PAVEMENTS.
- II. VERIFY ULTIMATE STRENGTH, REINFORCEMENT SIZE, PLACEMENT AND GRADE OF CONCRETE PAVEMENTS.
- C. STORM DRAIN AND SANITARY PIPE: I. CONTRACTOR TO PROVIDE HYDROSTATIC OR AIR TESTING OF ALL PIPES, JOINTS, MANHOLES, ETC. AS REQUIRED BY LOCAL AND
- STATE JURISDICTIONS. II. OBSERVE DEFLECTION TEST PERFORMED BY CONTRACTOR FOR ALL FLEXIBLE STORM AND SANITARY PIPE. DEFLECTION TEST TO

BE IN ACCORDANCE WITH OREGON CHAPTER APWA 303.9.

DEFERRED BIDDER DESIGN SUBMITTALS

FOUR (4) SETS OF DEFERRED SUBMITTAL ITEMS PER IBC 106.3.4.2 SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER OF RECORD. ALL DEFERRED SUBMITTALS SHALL INCLUDE AN ENGINEERED DESIGN FOR ALL SITE SPECIFIC APPLICATIONS OF THE DESIGNED ITEM AND SHALL BE STAMPED BY A LICENSED ENGINEER (SPECIALTY ENGINEER). THE DESIGN SHALL BE THE SOLE RESPONSIBILITY OF THE SPECIALTY ENGINEER INCLUDING, BUT NOT LIMITED TO THE DESIGN, COORDINATION, DIMENSIONS AND INTENDED PURPOSE. REVIEW BY THE ENGINEER OF RECORD SHALL BE GENERAL CONFORMANCE TO THE PROJECT DESIGN CRITERIA INDICATED ON THE DRAWINGS AND SPECIFICATIONS. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED BY THE ENGINEER OF RECORD AND APPROVED BY THE BUILDING OFFICIAL OR RESPONSIBLE REGULATING AGENCY HAVING JURISDICTION.

DEFERRED SUBMITTAL LIST:

- I. BUILDING FIRE SPRINKLER SYSTEM: 1) DESIGN, FURNISH & INSTALL COMPLETE BUILDING FIRE SPRINKLER SYSTEM(S) INCLUDING SYSTEM SIZING, ANTI-FREEZE SYSTEMS, FIRESTOP PENETRATION SYSTEMS, FIRE DETECTION & ALARM ANNUNCIATION PANELS, CONNECTION TO TAMPER SWITCHES AND SUPPLY LINES, LOW TEMPERATURE SWITCHES, FLOW DETECTORS, FDC APPURTENANCES, ETC.
- 2) PROVIDE SYSTEM DESIGN AND SIZING CALCULATIONS IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13/13R, THE LOCAL WATER DISTRICT AND THE FIRE MARSHAL'S OFFICE HAVING REVIEW AUTHORITY AND JURISDICTION FOR FIRE PROTECTION
- 3) FURNISH & SUBMIT TO ARCHITECT, LOCAL WATER DISTRICT AND FIRE MARSHAL DESIGN CALCULATIONS STAMPED BY AN OREGON LICENSED FIRE PROTECTION ENGINEER. THE FIRE PROTECTION ENGINEER SHALL BE RESPONSIBLE FOR OVERSEEING PREPARATION OF SHOP DWGS, SYSTEM INSTALLATION, INSPECTIONS, SYSTEM TESTING AND PROVIDE OWNER WITH CORRECTED RECORD DWGS AND FINAL ACCEPTANCE LETTER. SHOP DWGS SHALL INCLUDE PLANS, DETAILS & SCHEMATICS INCLUDING IDENTIFICATION OF ALL APPURTENANCES.
- 4) PROVIDE A SYSTEM OPERATIONS & MAINTENANCE MANUAL INCLUDING LISTS OF SYSTEM COMPONENTS WITH MANUFACTURER'S USE AND MAINTENANCE INSTRUCTIONS, AND WARRANTY INFO.

VIILDREN DESIGN GROUP ARCHITECTURE | INTERIORS

4875 SW Griffith Drive Suite 300 Beaverton OR, 97005 (503) 244-0552

8625 EVERGREEN WAY STE. 200 EVERETT, WA 98208

Project:

MANHASSET INDUSTRIAL

10500 SW MANHASSET DRIVE - SITE B TUALATIN, OR

Sheet Title:

CIVIL NOTES

Revisions:

EN DESIGN GROUP, P.C., 2021, ALL 3 RESERVED ©

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--|
| Date: | 8/18/2021 | |
| Drawn by: | Checked by: | |
| PRM | CJD | |
| Job Number: | 121067 | |
| Sheet | | |

| NOT | <u>'ES:</u> | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| 1. | WHEN RAINFALL AND RUNOFF OCCURS, A KNOWLEDGEABLE AND EXPERIENCED PERSON IN THE PRINCIPLES, PRACTICES, INSTALLATION, AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS WHO WORKS FOR THE PERMITTEE MUST PROVIDE DAILY INSPECTIONS OF THE EROSION AND SEDIMENT CONTROLS AND DISCHARGE OUTFALLS. | | | | |
| 2. | CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND FROM OCTOBER 1 THROUGH MAY 31ST EACH YEAR. | | | | |
| 3. | DURING WET WEATHER PERIOD, TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORK DAY. | | | | |
| 4. | SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION. THEY MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED. | | | | |
| 5. | ALL ACTIVE INLETS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. | | | | |
| 6. | SIGNIFICANT AMOUNTS OF SEDIMENT THAT LEAVES THE SITE MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PREFORMED ACCORDING TO THE OREGON DEPARTMENT OF STATE LANDS REQUIRED TIME FRAME. | | | | |
| 7. | SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES. | | | | |
| 8. | SEDIMENT MUST BE REMOVED FROM BEHIND ALL SEDIMENT CONTROL MEASURES WHEN IT HAS REACHED A HEIGHT OF 1/3-RD THE BARRIER HEIGHT AND PRIOR TO THE CONTROL MEASURES REMOVAL. | | | | |
| 9. | CLEANING OF ALL STRUCTURES WITH SUMPS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY 50% AND AT COMPLETION OF PROJECT. | | | | |
| 10. | ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL. | | | | |
| 11. | THE PERMITTEE MUST PROPERLY MANAGE HAZARDOUS WASTES, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION. | | | | |
| 12. | 12. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE FERTILIZERS SHOULD BE USED AND CARE SHOULD BE MADE IN APPLICATION OF FERTILIZERS WITHIN ANY WATER WAY RIPARIAN ZONE. | | | | |
| 13. | 13. OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH CURRENT CLEAN WATER SERVICES STANDARDS AND STATE, AND FEDERAL REGULATIONS. | | | | |
| 14. | 14. PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BOUNDARIES OF THE CLEARING LIMITS, VEGETATED BUFFERS, AND ANY SENSITIVE AREAS SHOWN ON THIS PLAN SHALL BE CLEARLY DELINEATED IN THE FIELD. UNLESS OTHERWISE APPROVED, NO DISTURBANCE IS PERMITTED BEYOND THE CLEARING LIMITS. THE OWNER/PERMITTEE MUST MAINTAIN THE DELINEATION FOR THE DURATION OF THE PROJECT. NOTE: VEGETATED CORRIDORS TO BE DELINEATED WITH ORANGE CONSTRUCTION FENCE OR APPROVED EQUAL. | | | | |
| 15. | 15. PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BMPS THAT MUST BE INSTALLED ARE GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMPS MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT. | | | | |
| 16. IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1ST; THE TYPE AND PERCENTAGES OF SEED IN THE MIX ARE AS IDENTIFIED ON THE PLANS OR AS SPECIFIED BY THE DESIGN ENGINEER. | | | | | |
| 17. WATERTIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMPS; SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE. | | | | | |
| 18. ALL PUMPING OF SEDIMENT LADEN WATER MUST BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP (I.E. FILTER BAG). | | | | | |
| 19. | THE ESC PLAN MUST BE KEPT ONSITE. ALL MEASURES SHOWN ON THE PLAN MUST BE INSTALLED PROPERLY TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER A SURFACE WATER SYSTEM, ROADWAY, OR OTHER PROPERTIES. | | | | |
| 20. | THE ESC MEASURES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED TO MAINTAIN COMPLIANCE WITH ALL REGULATIONS. | | | | |
| 21. | WRITTEN ESC LOGS ARE SUGGESTED TO BE MAINTAINED ONSITE AND AVAILABLE TO DISTRICT INSPECTORS UPON REQUEST. | | | | |
| 22. | IN AREAS SUBJECT TO WIND EROSION, APPROPRIATE BMPS MUST BE USED, WHICH MAY INCLUDE THE APPLICATION OF FINE WATER | | | | |
| 22 | SPRAYING, PLASTIC SHEETING, MULCHING, OR OTHER APPROVED MEASURES. | | | | |
| 25. | ALL EXPOSED SOILS MUST BE COVERED, AT END OF BUSINESS DAT, DURING WET WEATHER PERIOD, FROM OCTOBER 1 - MAT ST. | | | | |
| | | | | | |
| | | | | | |
| | STANDARD ERUSION CONTROL | | | | |
| ١ | NOTES FOR SITES LESS THAN 1 CleanWater Service | | | | |
| DF | AWING NO. 945 ACRE REVISED 10-31-19 | | | | |

ices

| | CIVIL ABBREVIATION | <u>5</u> | |
|------------------|---------------------------------|----------------|-------------------------|
| ABBR | ABBREVIATION | H.P. | HIGH POINT |
| AC | ASPHALT CONCRETE | HT | HEIGHT |
| AD | AREA DRAIN | IE | INVERT ELEVATION |
| ADA | AMERICANS WITH DISABILITIES ACT | | |
| | | | |
| ARCH | ARCHITECTURAL | l | I FNGTH |
| ARV | AIR RELIEF VALVE | LBS | POUNDS |
| BCR | BEGIN CURB RETURN | LF | LINEAR FEET |
| BF | BACKFLOW | LIN | LINEAR |
| BLDG | BUILDING | | |
| BOW | BOTTOM OF WALL | MANUF | |
| BS | BACK OF SIDEWALK | MECH | MECHANICAL |
| BTWN | BETWEEN | M.E.P. | MECHANICAL, ELEC |
| BPZ | BACK OF PEDESTRIAN ZONE | M.J. | MECHANICAL JOINT |
| B-W-V | BACKWATER VALVE | MH | MANHOLE |
| CB | | MIN | |
| C.I. | CONTROL JOINT | NS | NON SHRINK |
| CL or C/I | CENTER LINE | N.T.S. | NOT TO SCALE |
| CLR | CLEAR | 0.C. | ON CENTER |
| CO | CLEANOUT | 0.W.S. | OIL WATER SEPARA |
| CONC | CONCRETE | PL or P/L | PROPERTY LINE |
| CONI | | P.C. | |
| | CITY OF PORTLAND | P.C.C. PFRF | |
| | CHUVERT | PLYWD | PLYWOOD |
| | DOUBLE | P.P. | PRIMARY POWER/P |
| DC | DOUBLE CHECK | PROP | PROPOSED |
| DCDA | DOUBLE CHECK DETECTOR ASSEMBLY | PSF | POUNDS-PER-SQU |
| DET | | | |
| D.I. DIA or d | | PUF | |
| | DIMENSION | P.W. | PUBLIC WORKS |
| DOM | DOMESTIC | R or RAD | RADIUS |
| DWG | DRAWING | R.D. | ROOF DRAIN |
| DS | | | |
| | | RFHAB | REGOINED |
| EA | FACH | R.P. | RADIUS POINT |
| EG | EXISTING GRADE | RT | RIGHT |
| EJ | EXPANSION JOINT | R/W or ROW | RIGHT-OF-WAY |
| EL or ELEV | ELEVATION | SAN or S.S. | SLUPE SANITARY SEWER |
| | | SCHED | SCHEDULE |
| EOP | EDGE OF PAVEMENT | SED | SEDIMENTATION |
| E.O.R. | ENGINEER OF RECORD | SHT | SHEET |
| EQ | EQUAL | SPECS | SIMILAR |
| ER FSC | END RETURN | SQ | SQUARE |
| FW | FACH WAY | STA | STATION |
| EX or EXIST | EXISTING | STD | STANDARD |
| EXT | EXTERIOR | SIM | STORM SEWER |
| FDC | FIRE DEPARTMENT CONNECTION | STI | STEFI |
| FNDN FF | FUUNDATION FINISH FLOOR | STRUCT | STRUCTURAL |
| FG | FINISH GRADE | SW | SIDEWALK |
| FH | FIRE HYDRANT | TC | TOP OF CURB |
| FIN | FINISH | TOF | TOP OF FOOTING |
| FL | FLOW LINE | T.O.S. | TOP OF SLAB |
| FLG FLR | FLANGE | T.O.W. | TOP OF WALL |
| FP | FINISH PAVEMENT | TYP | TYPICAL |
| FPZ | FACE OF PEDESTRIAN ZONE | U.E. | UNDERGROUND ELE |
| FC | FACE OF CURB | U.U.N. | UNLESS UTHERWISE |
| FIG | FOOTING | U.R.M. | UNREINFORCED MA |
| GALV | GAGE OF GAUGE | U.T. | UNDERGROUND TEL |
| GB | GRADE BREAK | V.B. | VALVE BOX |
| GEN | GENERAL | VERT | VERTICAL |
| GR | GROUND | WIK W.I | |
| GS | GROUND SHOT | W.M. | WATER METER |
| GUT | GALVANIZED STEEL PIPE | W.Q. | WATER QUALITY |
| G.V. | GATE VALVE | WV | WATER VALVE |
| HDPE | HIGH-DENSITY-POLYETHYLENE | W/ | WITH |
| HORIZ | HORIZONTAL | W/O | WITHOUT |

| | EXISTING CONDITIONS LEGEND | | | | | |
|--------------------------------------------|-----------------------------------------|----------------------|--------------|--|--|--|
| 9 | EXISTING BUSH/SHRUB | S | EXISTING SAN | | | |
| | EXISTING DECIDUOUS TREE | XSAN | EXISTING SAN | | | |
| *** | EXISTING CONIFEROUS TREE | XG | EXISTING GAS | | | |
| C) | EXISTING POWER POLE | Х | EXISTING FEN | | | |
| — ХОН — | EXISTING OVERHEAD ELECTRICAL LINE | • | FOUND MONU | | | |
| XE | EXISTING UNDERGROUND ELECTRICAL LINE | ₽ | LOCAL BENCH | | | |
| , A A A A A A A A A A A A A A A A A A A | EXISTING FIRE HYDRANT | | EXISTING CON | | | |
| \bigotimes | EXISTING VAULT EXISTING WATER METER | | EXISTING ASP | | | |
| wv M | | <u>_\ </u> _ | EXISTING WET | | | |
| | EXISTING WATER LINE | — 100 [°] — | EXISTING MAJ | | | |
| | EXISTING STORM CATCH BASIN | — — - 99 - — — | EXISTING MIN | | | |
| XSTM | EXISTING STORM LINE | | | | | |
| | | | | | | |

NICAL NICAL, ELECTRICAL & PLUMBING NICAL JOINT

TER SEPARATOR RTY LINE OF CURVATURE

COUNTER CURVATURE

POWER/POWER POLE SED S-PER-SQUARE-FOOT OF TANGENCY NYL-CHLORIDE UTILITY EASEMENT WORKS

RAIN RCEMENT/REINFORCING

GROUND ELECTRICAL S OTHERWISE NOTED GROUND POWER IFORCED MASONRY GROUND TELEPHONE BOX

NITARY MANHOLE NITARY LINE S LINE NCE JMENTS HMARK ESTABLISHED AVEL NCRETE PHALT TLAND JOR

| AJOR CONTOUR | |
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| NOR CONTOUR | |

| PROPOSED LEGEND | | | |
|-------------------|-------------------------------------------------------|--|--|
| | STREET TREE AND TREE WELL | | |
| | CONCRETE SIDEWALK & SCORING | | |
| XX | TREE PROTECTION FENCE | | |
| X | TREE REMOVAL | | |
| x o | ORANGE CONSTRUCTION FENCE SEDIMENT CONTROL WATTLES | | |
| | CURB & GUTTER | | |
| SAN | SANITARY SEWER PIPE | | |
| Ø | SANITARY SEWER MANHOLE | | |
| 0 STM | SANITARY SEWER CLEANOUT | | |
| | STORM CATCH BASIN | | |
| (^O) | STORM MANHOLE | | |
| 0 | STORM CLEANOUT | | |
| WTR | WATER PIPE | | |
| 4 | WATER BEND | | |
| \bowtie | WATER VALVE | | |
| WM | WATER METER | | |
| Q | FIRE HYDRANT | | |
| —— G—— | GAS LINE | | |
| | | | |
| —— GH —— | | | |
| $\langle \bigcap$ | POWER POLE | | |
| | STREETLIGHT | | |
| | SIGNS | | |
| 100 | PROPOSED MAJOR CONTOUR | | |
| 99 | PROPOSED MINOR CONTOUR | | |

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| | ELECTRICAL METER | ACE ACE |
| WAT | POWER RISER | |
| ₩V] | POWER TRANSFORMER | |
| N OUT o ^{sc} | TELEPHONE/TELEVISION MANHOLE | |
| HOLE S | TELEPHONE/TELEVISION JUNCTION BOX | |
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| atch basin 🖨 | SIGN | |
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| WER INFORMATION | | 15E |
| IP INLET | (SD10) CATCH BASIN | S S S S S S S S S S S S S S S S S S S |
| 1.E. IN (W) = 133.92° NHOLE | RIM = 136.35 10" I.E. IN (E) = 133.9' | () Ŭ |
| I = 140.31' I = IN (S) = 134.3' | 21" I.E. IN (S) = $130.1'$ 21" I.E. OUT (N) = $130.0'$ | |
| 1.E. IN (W) = 133.9 | (SD11) MANHOLE | |
| 1.E. 001 (E) = 133.7 | RIM = 134.96 10" I.E. IN (E) = 130.4' | |
| M = 140.60' " LF IN (W) = 133.4' | 21" I.E. IN (S) = 129.5' 27" I.E. OUT (W) = 129.3' | |
| "I.E. IN (S) = 133.4 " | (SD12) MANHOLE PIM - 135 10' | |
| NHOLE | 10'' I.E. IN (N) = 130.6' | XSY |
| I = 137.12' ' LF. IN (SW) = 131.3' | 10 I.E. 001 (W) = 130.5 (SD13) CATCH BASIN | IV SE |
| " I.E. IN (S) = 131.1 " | RIM = 133.59' $10'' + F - OUT - (S) - 130.0'$ | L S∢ |
| NHOLE | (SD14) Lynch style catch basin | |
| = 137.12' I.E. IN (SW) = 131.3' | $\frac{RIM}{TRAP} = 135.28'$ | |
| 1.E. OUT (NE) = 131.2' | (SD15) LYNCH STYLE CATCH BASIN | |
| TOP = 132.62' | кім = 138.3 TRAP OUT (NW) | SCALE: AS NOTED |
| BUTIOM = 132.23 I.E. OUT (NE) = 131.6 | (SD16) LYNCH STYLE CATCH BASIN RIM = $1.38.40'$ | DRAWING GENERATED BY LD2004 |
| POUTFALL | TRAP OUT (NW) | DRAWN BY: BJA CHECKED BY: CHS |
| 1.2.001 (2) = 132.0 CH INLET | (SD17) LYNCH STYLE CATCH BASIN RIM = $138.35'$ | PREPARED FOR: |
| TOP = 134.67' BOTTOM = 133.28' | TRAP OUT (NW) | MIKE BERNATZ 8619 SW 56TH AVENUE |
| i.e. out (E) = $132.3'$ | | PORTLAND, OR 97221 |
| CH INLET TOP = 136.94' | and a start of the s Start of the start of | |
| BOTTOM = 135.57' | | REVISIONS: |
| 1.001 (H) = 102.4 | | IN HAL RELEASE: APR. 2, 2021 |
| .c. 001 (N) = 132.4 | [10] The analysis for the first of the second state of the first of the second state of the second stat | |
| L. OUT (NY - 152.+ | | an a |
| 0. 962. The Benchmark IS / An Elevation of 189.81 feet | A BRASS DISK AT ON THE NGVD 1929 | REGISTERED |
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MILDREN DESIGN GROUP ARCHITECTURE | INTERIORS 4875 SW Griffith Drive Suite 300 Beaverton OR, 97005 (503) 244-0552 RIPPEY F 7650 S Tigard Phone: Fax: (5 Client/ Owner: MANHASSET INDUSTRIAL LLC 8625 EVERGREEN WAY STE. 200 EVERETT, WA 98208 Project: MANHASSET INDUSTRIAL 10500 SW MANHASSET DRIVE - SITE B TUALATIN, OR Sheet Title: EXISTING CONDITIONS Revisions: REN DESIGN GROUP, P.C., 2021, ALL S RESERVED © THESE DRAWINGS ARE THE PROPERTY OF MILDREN DESIGN GROUP, P.C., AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF MILDREN DESIGN GROUP, P.C Date: 8/18/2021 Checked by: Drawn by:

Project Status

C1.3

CJD

121067

PRM

Sheet

Job Number

Project Status

C2.0

Project Status

C2.2

1/8" x 1" FLAT BAR— @ 5 1/2" O.C. OVER GRATING (TYP)

ILDREN

ARCHITECTURE | INTERIORS

4875 SW Griffith Drive Suite 300

DESIGN

GROUP

Beaverton OR, 97005

(503) 244-0552

CIVIL DETAILS

8/18/2021 Checked by: 121067

Project Status

C3.1

ARCHITECTURE | INTERIORS 4875 SW Griffith Drive Suite 300 Beaverton OR, 97005 (503) 244-0552

<u>KEYNOTES</u>

- 1 CONCRETE TILT UP TRASH AND RECYCLING ENCLOSURE-P1, WITH CHAINLINK FENCE AND VINYL SLATS
- 2 NEW CONCRETE TILT UP BUILDING
- 3 ACCESSIBLE PARKING SPACE, AISLE, SIGNAGE AND RAMP SEE DETAIL 4 VAN ACCESSIBLE PARKING SPACE, AISLE, SIGNAGE AND RAMP - SEE DETAIL
- 5 NEW 5'-0" WIDE CONCRETE SIDEWALK
- 6 ROOF HATCH LADDER
- 7 KNOX BOX
- 8 ADJUST DRAINAGE SWALE FOOTPRINT TO MAINTAIN VOLUME REQUIREMENT
- 9 9'-0" X 18'-6" PARKING STALL 10 48" HIGH LOADING DOCK
- 11 DEMO EXISTING CURB CONNECT TO NEW ACCESS
- 12 PEDESTRIAN ACCESS AND CONCRETE PAD
- 13 EXISTING CURB TO REMAIN. MIN 5'-0" LANDSCAPING
- 14 PARKING LOT LANDSCAPE ISLAND

<u>LEGEND</u>

FE

- DRIVE-IN DOOR DOCK-HIGH DOOR
- ACTUAL TRAVEL DISTANCE PATH
 - NOTE: FIRE EXTINGUISHER, VERIFY LOCATION WITH FIRE MARSHAL
- DIRECTIONAL LIGHTED EXIT SIGN SHALL BE ON \mathbf{T} EMERGENCY BACKUP POWER. IT SHALL BE PROVIDED AT ALL APPLICABLE EXIT DOOR PER FUTURE TENANT IMPROVEMENT REQUIREMENT.

<u>SITE DATA</u>

SITE AREA BUILDING AREA TRASH ENCLOSURE TOTAL PAVING AREA LANDSCAPE % PARKING TOTAL

104,912 S.F. 44,647 S.F. 272 S.F. 86,610 S.F. 17.4% 53 SPACES

| 0 | 15' | 30' | 60' |
|---|-----|-----|-----|

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| Client/ Owner: |
| MANHASSET |
| INDUSTRIAL |
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| |
| 8625 EVERGREEN WAY STE. 200 EVERETT WA 98208 |
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| |
| INDUSTRIAL |
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| |
| 10500 SW MANHASSET |
| TUALATIN, OR |
| Sheet Title: |
| SITE PLAN |
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| Revisions: |
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| A1.1 |
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120'

GENERAL NOTES

- A. SEE SHEET A0.2 FOR EXTERNAL WALL, INTERIOR WALL AND EXTERIOR HORIZONTAL ASSEMBLIES.B. INSIDE FINISHED DOOR JAMB FROM WALL AT HINGE SIDE, UNO.
- C. INTERIOR DIMENSIONS ARE FROM CENTERLINE OF STUDS AND
- COLUMNS, OR FACE OF FINISH, UNO. EXTERIOR DIMENSIONS ARE FROM FACE OF CONCRETE TO FACE OF CONCRETE UNO.
- D. DASHED RECTANGLE INDICATED MINIMUM FIXTURE ACCESS
- CLEARANCE & ACCESSIBLE DOOR CLEARANCES. E. ALL MECHANICAL, PLUMBING AND ELECTRICAL PENETRATIONS
- THROUGH RATED ASSEMBLIES SHALL BE FIRESTOPPED. F. ALL CROSS SLOPES ALONG ACCESSIBLE ROUTES TO CONFORM TO
- ACCESSIBILITY REQUIREMENTS (2%) SEE CIVIL FOR GRADING. G. CONTRACTOR TO VERIFY CLEARANCE REQUIREMENTS FOR
- APPLIANCES, PLUMBING FIXTURES, ETC PRIOR TO FRAMING. H. SEE A0.3 FOR REQUIRED CODE CLEARANCES .
- I. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES HAVING JURISDICTION. J. SEE STRUCTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING
- DOCUMENTS FOR ADDITIONAL INFORMATION AND COORDINATION. K. CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL CONTRACT DOCUMENTS. FIELD CONDITIONS AND CONFIRMING THAT WORK IS BUILDABLE AS SHOWN BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION QUESTIONS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAIN CLARIFICATIONS BEFORE PROCEEDING WITH WORK IN QUESTION.
- L. "TYPICAL"AS USED IN THESE DOCUMENTS SHALL MEAN THAT THE CONDITION IS THE SAME OR REPRESENTATIVE FOR ALL SIMILAR CONDITIONS THROUGHOUT, U.N.O..
- M. SURFACE MOUNTED FIRE EXTINGUISHERS TYPE 2A-10BC TO BE INSTALLED AT A MAX 75'-0" TRAVEL DISTANCE, PER FIRE EXTINGUISHER AND A MAXIMUM OF +4'-6" A.F.F. TO TOP OF EXTINGUISHER.
- N. CONSTRUCT ALL RATED WALLS IN COMPLIANCE WITH U.L. STANDARDS.
- 0. FLOORS/ LANDING AT DOORS NOT TO EXCEED 1/2" ELEVATION CHANGE.
- P. MAINTAIN MIN 48" CLEAR UNOBSTRUCTED EMERGENCY EXIT AISLE TOWARD DESIGNATED EXIT.
- Q. SEE FOUNDATION PLAN FOR ALL CONSTRUCTION JOINTS AT CONCRETE SLAB.
- R. ALL EXITS TO BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE. MANUALLY OPERATED EDGE OR SURFACE MOUNTED FLUSH BOLTS ARE PROHIBITED ON EXIT DOORS. S. COORDINATE KNOX BOX LOCATION PER LOCAL CODES.

KEYNOTES

CONCRETE TILT UP TRASH AND RECYCLING ENCLOSURE-P1, WITH CHAINLINK FENCE AND VINYL SLATS CANOPY LIGHT FIXTURE

- VALLEY
- DRIVE THROUGH DOOR ACCESS NEW CONCRETE TILT UP BUILDING
- KNOX BOX
- ACCESSIBLE PARKING SPACE, AISLE, SIGNAGE AND RAMP SEE DETAIL
- VAN ACCESSIBLE PARKING SPACE, AISLE, SIGNAGE AND RAMP - SEE DETAIL
- ROOF HATCH LADDER
- 10 STORMWATER DETENTION POND FIRE EXTINGUISHER 75'-0" COVERAGE RADIUS 11
- EXTENT OF UNDERSLAB VAPOR BARRIER, WHERE OFFICE 12
- OCCURS LINE OF POTENTIAL MEZZANINE ABOVE 13
- NEW 6" HIGH CAST IN PLACE CONCRETE CURB 14
- 15 9'-0" X 18'-6" PARKING STALL

<u>LEGEND</u>

DRIVE-IN DOOR DOCK-HIGH DOOR

ACTUAL TRAVEL DISTANCE PATH

NOTE: FIRE EXTINGUISHER, VERIFY LOCATION WITH FIRE MARSHAL

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4875 SW Griffith Drive Suite 300 Beaverton OR, 97005 (503) 244-0552 Client/ Owner: MANHASSET INDUSTRIAL LLC 8625 EVERGREEN WAY STE. 200 EVERETT, WA 98208 Project: MANHASSET INDUSTRIAL 10500 SW MANHASSET DRIVE - SITE B TUALATIN, OR Sheet Title: ENLARGED SITE PLAN Revisions: Description Date MILDREN DESIGN GROUP, P.C., 2021, ALL RIGHTS RESERVED © THESE DRAWINGS ARE THE PROPERTY OF MILDREN DESIGN GROUP, P.C., AND ARE NOT TO BE USED OR REPRODUCED IN ANY MANNER, EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF MILDREN DESIGN GROUP, P.C. Date: Issue Date Drawn by: Checked by: Author Checker Job Number: 121067 Sheet

DESIGN

GROUP

ARCHITECTURE | INTERIORS

A1.2

| | | | 1 A4. | |
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| | 9' - 10" | |
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<u>KEYNOTES</u>

- WALL PACK LIGHT FIXTURE
 DOCK BUMPERS
 KNOX BOX

| 0 | 8' | 16' | 32' | 64' |
|---|----|-----|-----|-----|

ARCHITECTURE | INTERIORS 4875 SW Griffith Drive Suite 300 Beaverton OR, 97005 (503) 244-0552

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Client/ Owner:

MANHASSET INDUSTRIAL LLC

8625 EVERGREEN WAY STE. 200 EVERETT, WA 98208

Project:

MANHASSET INDUSTRIAL

10500 SW MANHASSET DRIVE - SITE B TUALATIN, OR

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ELEVATIONS

Revisions: Date # Description

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A3.1

Sheet

Exterior Lighting

Lithonia Lighting Wall Mount Site Fixture DSX2 P1

Lithonia Lighting Wall Mount Loading Fixture WDGE2

Eureka Lighting Wall Mount Entrance Sconce WDGE2

Lithonia Lighting Drive Access Entrance Bollard WDGE2

FINISHES: Semi Gloss

COLOR: Dark Bronze

COLOR: Software (Mfr. Sherwin-Williams)

COLOR: African Gray (Mfr. Sherwin-Williams)

COLOR: Dorian Gray (Mfr. Sherwin-Williams)

COLOR: Going Gray (Mfr. Sherwin-Williams)

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8625 EVERGREEN WAY STE. 200 EVERETT, WA 98208

10500 SW MANHASSET DRIVE - SITE B TUALATIN, OR

Sheet Title:

MATERIALS

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| Job Number: | 121067 | | | |
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| LANT LIST: SYMBOI | QTY. | LATIN NAME/ Common Name | SIZF | SPACING |
|---------------------------|------|-----------------------------------------------------------|------------------|----------|
| | | | JILL | |
| \sim \sim | TREE | S | | |
| | 9 | ACER RUBRUM 'OCTOBER GLORY' | 1.5" cal. | As Shown |
| | Ĵ | October Glory Red Maple | | |
| \bigvee | | | | |
| | | | | |
| $\left(\cdot \right)$ | 11 | CARPINUS BETULUS 'FRANS FONTAINF' | 1.5" cal | As Shown |
| | | Frans Fontaine European Hornbeam | | |
| ↓ ►h | | | | |
| AD2 | 5 | FAGUS SYLVATICA 'DAWYCK PURPLE' | 1.5" cal. | As Shown |
| \times | | Dawyck Purple Columnar Beech | | |
| $\sqrt{-1}$ | | | | |
| $\langle \rangle \rangle$ | Q | FRAVINIIS OVYCADDA 'DAVWOOD' | 15" col | As Shawe |
| YN. | 0 | Raywood Ash | 1.5 Cul. | AS SHOWN |
| | | | | |
| | | | | |
| | 4 | PARROTIA PERSICA | 1.5" cal | As Shown |
| | • | Persian Ironwood | 1.5 cui. | As Shown |
| XI | | | | |
| | | | | |
| {X} | 3 | PINUS FLEXILIS 'VANDERWOLF'S PYRAMID' | 5' ht. | As Shown |
| $\chi \gamma$ | | vanderwoits fyramia Limber Pine | | |
| | SHRU | BS | | |
| ۲ | 90 | ABELIA GRANDIFLORA 'ROSE CREEK' | 5 gal. | 3'o.c. |
| (·`) | 37 | Rose Creek Abelia CISTUS LADANIFER | 5 aal. | 5'o.c. |
| പ | 25 | Crimson Spot Rock Rose | 5 ad | 4' 0 0 |
| 5 | 20 | Sky Pencil Japanese Holly | 7 gui. | т U.U. |
| G ~ | 01 | Shamrock Inkberry | ত gai. | ∠ o.c. |
| રન્ડ | 83 | LIGUSTRUM JAPONICUM 'TEXANUM' Waxleaf Privet | 5 gal. | 5'o.c. |
| \odot | 88 | NANDINA DOMESTICA 'NANA PURPUREA' Dwarf Purple Nandina | 2 gal. | 30" o.c. |
| E. | 12 | PHORMIUM 'SURFER' Surfer New Zealand Flax | 2 gal. | 4' o.c. |
| \otimes | 27 | JUNIPERUS SCOPUL. 'WICHITA BLUE' | 3 -4' ht. | 5'o.c. |
| s¥k | 9 | SALIX PURPUREA 'NANA' | 5 gal. | 8'o.c. |
| AND CO | 32 | Dwarf Arctic Blue Willow VIBURNUM DAVIDII | 3 aal. | 30" o.c. |
| Ŵ | | David Viburnum | J | |
| | GROL | INDCOVER & PERENNIALS | | |
| * | 91 | CAREX OSHIMENSIS 'EVERGOLD' | 1 gal. | 2'o.c. |
| XXXX | 460 | Evergold Sedge COTONEASTER DAMMERI 'EICHOLZ' | 1 aal. | 3'o.c. |
| | 32 | Eicholz Cotoneaster MAHONIA REPENS | 1 aal | 3' 0 0 |
| <u>+++++</u> | 01 | | 1 gui. | 0' |
| | 01 | Japanese Spurge | ı gal. | ∠ 0.C. |
| | STOR | MWATER FACILITY | | |
| | | PLANTING PER CLEAN WATER SERVICES | | |
| | | | | |

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<u>GENERAL NOTES:</u> 1. Contractor is to verify all plant quantities. 2. Adjust plantings in the field as necessary.

3. Project is to be irrigated by an automatic, underground system, which will provide full coverage for all plant material. System is to be design/ build by Landscape Contractor. Guarantee system for a minimum one year. Show drip

systems as alternate bid only. 4. All plants are to be fully foliaged, well branched and true to form.

5. Contractor is to notify Landscape Architect or Owner's Representative of any site changes or unforeseen conditions that may be detrimental to plant health, or cause future problems to any structural elements of the project.

L1.0

Date

OUTLINE SPECIFICATIONS PLANTING AND SEEDING:

GENERAL: All plants shall conform to all applicable standards of the latest edition of the "American Association of Nurserymen Standards", A.N.S.I. Z60.1 - 1973. Meet or exceed the regulations and laws of Federal, State, and County regulations, regarding the inspection of plant materials, certified as free from hazardous insects, disease, and noxious weeds, and certified fit for sale in Oregon.

The apparent silence of the Specifications and Plans as to any detail, or the apparent omission from them of a detailed description concerning any point, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of first quality are to be used. All interpretations of these Specifications shall be made upon the basis above stated.

Landscape contractor shall perform a site visit prior to bidding to view existing conditions.

PERFORMANCE QUALITY ASSURANCE: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary horticultural practices and who are completely familiar with the specified requirements and methods needed for the proper performance of the work of this section.

NOTIFICATION: Give Landscape Architect minimum of 2 days advance notice of times for inspections. Inspections at growing site does not preclude Landscape Architect's right of rejection of deficient materials at project site. Each plant failing to meet the above mentioned "Standards" or otherwise failing to meet the specified requirements as set forth shall be rejected and removed immediately from the premises by the Contractor and at his expense, and replaced with satisfactory plants or trees conforming to the specified requirements.

SUBSTITUTIONS: Only as approved by the Landscape Architect or the Owner's Representative.

GUARANTEE AND REPLACEMENT: All plant material shall be guaranteed from final acceptance for one full growing season or one year, whichever is longer. During this period the Contractor shall replace any plant material that is not in good condition and producing new growth (except that material damaged by severe weather conditions, due to Owner's negligence, normally unforeseen peculiarities of the planting site, or lost due to vandalism). Guarantee to replace, at no cost to Owner, unacceptable plant materials with plants of same variety, age, size and quality as plant originally specified. Conditions of guarantee on replacement plant shall be same as for original plant.

Landscape Contractor shall keep on site for Owner's Representative's inspection, all receipts for soil amendment and topsoil deliveries.

PROTECTION: Protect existing roads, sidewalks, and curbs, landscaping, and other features remaining as final work. Verify location of underground utilities prior to doing work. Repair and make good any damage to service lines, existing features, etc. caused by landscaping installation.

PLANT QUALITY ASSURANCE: Deliver direct from nursery. Maintain and protect roots of plant material from drying or other possible injury. Store plants in shade and protect them from weather immediately upon delivery, if not to be planted within four hours.

Nursery stock shall be healthy, well branched and rooted, formed true to variety and species, full foliaged, free of disease, injury, defects, insects, weeds, and weed roots. Trees shall have straight trunks, symmetrical tips, and have an intact single leader. Any trees with double leaders will be rejected upon inspection. All Plants: True to name, with one of each bundle or lot tagged with the common and botanical name and size of the plants in accordance with standards of practice of the American Association of Nurserymen, and shall conform to the Standardized Plant Names, 1942 Edition.

Container grown stock: Small container-grown plants, furnished in removable containers, shall be well rooted to ensure healthy growth. Grow container plants in containers a minimum of one year prior to delivery, with roots filling container but not root bound. Bare root stock: Roots well-branched and fibrous. Balled and burlapped (B&B): Ball shall be of natural size to ensure healthy growth. Ball shall be firm and the burlap sound. No loose or made ball will be acceptable.

TOPSOIL AND FINAL GRADES: Landscape Contractor is to supply and place 12" of topsoil in planting beds and 6" in lawn areas. Landscape Contractor is to verify with the General Contractor if the on-site topsoil is or is not conducive to proper plant growth. The topsoil shall be a sandy loam, free of all weeds and debris inimical to lawn or plant growth. Furnish soil analysis by a qualified soil testing laboratory stating percentages of organic matter; gradation of sand, silt and clay content; cation exchange capacity; deleterious material; pH; and plant nutrient content of the topsoil. Report suitablility of topsoil for plant growth and recommended quantities of nitrogen, phosphorus and potash nutrients and soil amendments (including compost) to be added to produce satisfactory topsoil. If stockpiled topsoil on site is not conducive to proper plant growth, the Landscape Contractor shall import the required amount.

Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated. Planting bed grades shall be approximately 3" below adjacent walks, paving, finished grade lines, etc., to allow for bark application. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

PLANTING SPECIFICATIONS:

HERBICIDES: Prior to soil preparation, all areas showing any undesirable weed or grass growth shall be treated with Round-up in strict accordance with the manufacturer's instructions.

SOIL PREPARATION: Work all areas by rototilling to a minimum depth of 8". Remove all stones (over 1½" size), sticks, mortar, large clumps of vegetation, roots, debris, or extraneous matter turned up in working. Soil shall be of a homogeneous fine texture. Level, smooth and lightly compact area to plus or minus .10 of required grades.

In groundcover areas add 2" of compost (or as approved) and till in to the top 6" of soil.

PLANTING HOLE: Lay out all plant locations and excavate all soils from planting holes to 2 1/2 times the root ball or root system width. Loosen soil inside bottom of plant hole. Dispose of any "subsoil" or debris from excavation. Check drainage of planting hole with water, and adjust any area showing drainage problems.

SOIL MIX: Prepare soil mix in each planting hole by mixing: 2 part native topsoil (no subsoil) 1 part compost (as approved)

Thoroughly mix in planting hole and add fertilizers at the following rates: Small shrubs - 1/8 lb./ plant Shrubs - 1/3 to 1/2 lb./ plant Trees - 1/3 to 1 lb./ plant

FERTILIZER: For trees and shrubs use Commercial Fertilizer "A" Inorganic (5-4-3) with micro-nutrients and 50% slow releasing nitrogen. For initial application in fine seed lawn areas use Commercial Fertilizer "B" (8-16-8) with micro-nutrients and 50% slow-releasing nitrogen. For lawn maintenance use Commercial Fertilizer "C" (22-16-8) with micro-nutrients and 50% slow-releasing nitrogen. <u>DO NOT</u> apply fertilizer to Water Quality Swale.

PLANTING TREES AND SHRUBS: Plant upright and face to give best appearance or relationship to adjacent plants and structures. Place 6" minimum, lightly compacted layer of prepared planting soil under root system. Loosen and remove twine binding and burlap from top 1/2 of root balls. Cut off cleanly all broken or frayed roots, and spread roots out. Stagger Plants in rows. Backfill planting hole with soil mix while working each layer to eliminate voids.

When approximately 2/3 full, water thoroughly, then allow water to soak away. Place remaining backfill and dish surface around plant to hold water. Final grade should keep root ball slightly above surrounding grade, not to exceed 1". Water again until no more water is absorbed. Initial watering by irrigation system is not allowed.

STAKING OF TREES: Stake or guy all trees. Stakes shall be 2" X 2" (nom.) quality tree stakes with point. They shall be of Douglas Fir, clear and sturdy. Stake to be minimum 2/3 the height of the tree, not to exceed 8'-0". Drive stake firmly 1'-6" below the planting hole. Tree ties for deciduous trees shall be "Chainlock" (or better). For Evergreen trees use "Gro-Strait" Tree Ties (or a reinforced rubber hose and guy wires) with guy wires of a minimum 2 strand twisted 12 ga. wire. Staking and guying shall be loose enough to allow movement of tree while holding tree upright. Tree stakes shall be removed after one year.

MULCHING OF PLANTINGS: Mulch planting areas with dark, aged, medium grind fir or hemlock bark (aged at least 6 months) to a depth of 2" in ground cover areas and 2½" in shrub beds. Apply evenly, not higher than grade of plant as it came from the nursery, and rake to a smooth finish. Water thoroughly, then hose down planting area with fine spray to wash leaves of plants.

FINE LAWN AREAS: In fine lawn area apply Commercial Fertilizer Mix "B" at 4.5 lbs. Per 1,000 sq.ft. and rake into soil surface. Establish an even, fine textured seedbed meeting grades, surfaces and texture. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

ROUGH SEED AREA: In rough seeded area, establish an evenly graded seedbed. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

SEED: Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis. Fine Lawn Seed Mix: To contain 50% Top Hat Perennial Ryegrass, 30% Derby Supreme Ryegrass, 20% Longfellow Chewings Fescue (Hobbs and Hopkins Pro-Time 303 Lawn Mix

or as approved) Sow Seed at 5 lbs. / 1000 sq. ft.

Rough Seed Mix: To Contain: 60% Perennial Ryegrass, 15% Eureka Hard Fescue, and 20% Herbaceous Plants and Clover (Hobbs and Hopkins Pro-Time 705 PDX, or approved equal). Sow at 2 lbs. Per 1,000 sq.ft.

MAINTENANCE OF SEEDED AREAS:

Fine Lawn Areas: The lawn areas shall be maintained by watering, mowing, reseeding, and weeding for a minimum of 60 days after seeding. After 30 days, or after the second mowing, apply Commercial Fertilizer Mix "C" at 5 lbs. per 1,000 sq. ft. Mow and keep at 1½" to 2" in height. Remove clippings and dispose of off site.

GENERAL MAINTENANCE: Protect and maintain work described in these specifications against all defects of materials and workmanship, through final acceptance. Replace plants not in normal healthy condition at the end of this period. Water, weed, cultivate, mulch, reset plants to proper grade or upright position, remove dead wood and do necessary standard maintenance operations. Irrigate when necessary to avoid drying out of plant materials, and to promote healthy growth.

CLEAN-UP: At completion of each division of work all extra material, supplies, equipment, etc., shall be removed from the site. All walks, paving, or other surfaces shall be swept clean, mulch areas shall have debris removed and any soil cleared from surface. All areas of the project shall be kept clean, orderly and complete.

WATER QUALITY PER APPENDIX A OF CLEAN WATER SERVICES DESIGN & CONSTRUCTION STANDARDS:

SITE PREPARATION: Landscape contractor shall asses the existing soil conditions of the vegetated swale and/or corridor to determine the appropriate soil preparation methods, as follows:

For areas with at least one foot of native topsoil, but containing non-native or invasive plants, remove undesirable plants, roots and seeds prior to planting. For areas with either disturbed or compacted soils, or less than one foot of topsoil and containing non-native or invasive plants:

- 1. Remove undesireable plants, roots and seeds prior to adding topsoil. 2. Till the sub-grade in these areas to a depth of at least 4" and add at least 12" of clean compost-amended topsoil. The compost amended topsoil shall have the
- following characteristics to ensure a good growing medium: A) Texture — material passes through 1" screen
- B) Fertility 35% organic matter

3. In the event of flood plain grading, over-excavate the sub grade to ensure 12" of topsoil can be applied without impacting surface water elevations.

Where appropriate and necessary for erosion control or to enhance organic matter, leaf compost may be placed uniformly on the topsoil. (Refer to Chapter 6, Erosion Prevention and Sediment Control). Other amendments, conditioners, and bio amendments may be added as needed to support the specified plants or adjust the soil pH. Traditional fertilization techniques (appplying N-P-K) are not necessary for native plants.

TIMING: Containerized stock shall be installed between February 1 and May 1, or between October 1 and November 15. Bare root stock shall be installed only from December 15 through April 15 (bare root stock must be 12-16 inches long). Notify Landscape Architect if planting must be performed outside these times, as additional approved measures may be needed to assure survival.

EROSION CONTROL: Grading, soil preparation, and seeding shall be performed during optimal weather conditions and at low flow levels to minimize sediment impacts. Site disturbance shall be minimized and desirable vegetation retained, where possible. Slopes shall be graded to support the establishment of vegetation. Where seeding is used for erosion control, an appropriate native grass, Regreen (or its equivalent), or sterile wheat shall be used to stabilize slopes until permanent vegetation is established. Biodegradable fabrics (coir, coconut or approved jute matting (minimum 1/4" square holes) may be used to stabilize slopes and channels. Fabrics such as burlap may be used to secure plant plugs in place and to discourage floating upon inundation. No plastic mesh that can entangle wildlife is permitted. Consult CWS Chapter 6 - Erosion Prevention and Sediment Control for additional information.

A biodegradable Erosion Control Matting shall be placed over the topsoil throughout the swale cross section, fabric shall be held in place in accordance with the manufacturer's installation requirements. Use high density jute matting in the treatment area (Geojute Plus or approved equal). In all other areas use low density jute matting (Econojute or approved equal). Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated on civil plans. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.

INVASIVE SPECIES CONTROL: Mechanical control by hand consistent with Clean Water Services' Integrated Vegetated and Animal Management Guide (March 2003) is recommended to control invasive spread prior to installing plantings. Invasive species control to be conducted as needed based upon the site inspections.

FERTILIZER: Do not apply fertilizer to any plantings within the Water Quality Swale or Wetland Buffer.

PLANTING TREES AND SHRUBS: Follow general planting specifications. Plantings shall be tagged for dormant season identification and shall remain on plant material after planting for monitoring purposes.

MULCHING: Trees, shrubs, and groundcovers planted in upland areas shall be mulched a minimum of 3" in depth and 18" in diameter, to retain moisture and discourage weed growth around newly installed plant material. Appropriate mulches are made from composted bark or leaves that have not been chemically treated. The use of mulch in frequently inundated areas shall be limited, to avoid any possible water quality impacts including the leaching of tannins and nutrients, and the migration of mulch into waterways.

For vegetated swales, see CWS Standard Detail 710 for mulching of the treatment area plantings.

WILDLIFE PROTECTION: Depending on site conditions, appropriate measures shall taken to limit wildlife-related damage (deer, beaver, nutria, mice and voles). Examples include installing tree protector tubes or wire mesh cylinders around newly installed plantings.

SEED: Bluetag grass seed conforming to applicable State laws. No noxious weed seeds. Submit Guaranteed analysis. Wetland Buffer Seed: To contain 20% California Brome, 20% Blue Wildrye, 50% Native Red Fescue, and 10% Large-leafed Lupine. (Hobbs & Hopkins Clean Water Dray Area Seed Mix or approved equal). Apply at a rate of 1 lb / 1,000 sq.ft. Install seed as needed for bare soil areas larger than 25 sq.ft. following invasive species removal. Freeboard Area Seed: To contain 40% Dwarf Tall Fescue, 30% Dwarf Perennial Rye, 25% Creeping Red Fescue and 5% Colonial Bent Grass. Apply at a rate of 2.75 lbs. / 1,000 sa.ft.

Moist Area Seed: To contain 45% American Sloughgrass, 45% Western Mannagrass, 5% Spreading Rush and 5% Slough Sedge (Hobbs & Hopkins ProTime 406 Native Water Quality Mix for Wet Areas or approved equal). Apply at a rate of 1 lb / 1,000 SF.

IRRIGATION: Plantings shall be watered using an approved temporary irrigation system (or equivalent) during the two year establishment period. Irrigation system shall be design/build by landscape contractor. All plantings under CWS jurisdiction are to be watered one inch per week from June 15 through October 15 for the duration of the two year maintenance period.

MAINTENANCE: The permitee is responsible for the maintenance of this facility to assess the status of plantings, irrigation, and mulchingfor for a minimum of two years following the acceptance of the facility by Clean Water Services. Owners Representative shall inspect the facility twice annually (Spring by June 1st & Fall by September 30th) throughout the two-year maintenance period. If at any time during the warranty period the landscaping falls below 80% survival of trees and shrubs, or 90% gerial coverage of herbaceous plants, or if the amount of invasive non-native species exceeds 20%, the Owner shall remove the undesirable vegetation and reinstall all deficient planting at the next appropriate time. The cause of plant loss and corrective measures taken shall be documented, and the two-year maintenance period shall begin again from the date of replanting.

ARCHITECTURE | INTERIORS 4875 SW Griffith Drive Suite 300 Beaverton OR, 97005 (503) 244-0552

EGISTERED LA793 ERIN HOLSONBACK OREGON 5/10/2013 EXP. 5/31/22 CAPE ARC

OTTEN + ASSOCIATES LANDSCAPE ARCHITECTURE 3933 South Kelly Avenue, Suite B

Portland, OR, 97239 (503) 972-0311 www.ottenla.com

Client/ Owner:

MANHASSET INDUSTRIAL LLC

8625 EVERGREEN WAY STE. 200 EVERETT, WA 98208

MANHASSE1 **INDUSTRIAL**

10500 SW MANHASSET DRIVE - SITE B TUALATIN, OR

Sheet Title:

Project:

LANDSCAPE SPECS

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| Description | | | | |

Date

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| Drawn by: | Checked by: | | | |
| EEH | EEH | | | |
| Job Number: | 121067 | | | |
| Sheet | | | | |

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TOP OF BARK TO BE AT CROWN OF ROOTBALL

| 2" MOUND FOR - WATER BASIN | $\overline{\}$ |
|---------------------------------------------------------------------|----------------|
| 2'x 2" DOUG FIR STAKES. 3 STAKE EQUALLY SPACED AROUND TREE | S |

REMOVE BURLAP

EVERGREEN TREE STAKING DETAIL NOT TO SCALE

— INSTALL TREATMENT AREA

STORMWATER FACILITY PLANTING DETAIL NOT TO SCALE

| 2" x 2" D.F. STAKES-HOLD VERTICAL. DO NOT PENETRATE ROOTBALL. TWO PER TREE. STAKES TO BE PLACED PERPENDICULAR TO PREVAILING WINDS. |
|------------------------------------------------------------------------------------------------------------------------------------------------|
| CHAINLOCK TREE TIES (OR AS APPROVED). |
| CROWN OF ROOTBALL TO BE 2" ABOVE FINISHED GRADE. |
| 2" MOUND FOR WATER BASIN. |
| 2 1/2" BARK MULCH. KEEP MULCH 6" AWAY FROM TRUNK. |
| FINISH GRADE. |
| BACKFILL SOIL MIXTURE |
| X ROOTBALL -EXISTING SUBGRADE. |
| DO NOT OVER EXCAVATE DIRECTLY UNDER ROOTBALL. |
| NGES TO OUR SPECIFICATION OR DETAIL SHOULD BE |

APPROVED BY THE LANDSCAPE ARCHITECT. LIKEWISE, IN ACCORDANCE WITH BEST PRACTICES OF LOCAL LANDSCAPE INSTALLATION, SHOULD THE LANDSCAPE CONTRACTOR FIND A PREFERRED ALTERNATE METHOD, THE LANDSCAPE ARCHITECT

| IDUOUS | TREE | PLANTING | DETAIL |
|--------|------|----------|----------|
| | | NOT | TO SCALE |

SHRUB PLANTING DETAIL NOT TO SCALE

ARCHITECTURE | INTERIORS 4875 SW Griffith Drive Suite 300 Beaverton OR, 97005 (503) 244-0552

DEGISTERED LA793 -ERIN HOLSONBACK T OREGON 5/10/2013 🖏 EXP. 5/31/22 🔬 "CAPE AR'

OTTEN + ASSOCIATES LANDSCAPE ARCHITECTURE 3933 South Kelly Avenue, Suite B Portland, OR, 97239

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www.ottenla.com

Client/ Owner:

MANHASSET INDUSTRIAL LLC

8625 EVERGREEN WAY STE. 200 EVERETT, WA 98208

MANHASSET **INDUSTRIAL**

10500 SW MANHASSET DRIVE - SITE B TUALATIN, OR

Sheet Title:

Project:

LANDSCAPE DETAILS

Revisions: # Description

Date

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| EEH | EEH | | | |
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| ents/1210671 | | | L1 | 3 Lithonia L | ighting | DSX2 LED P1 40K T4M MVOLT | DSX2 LED P1 40K T4M MVOLT | 140 |
| /TMA/Docum | | | L2 | 4 Lithonia L | ighting | MVOLT DSX2 LED P1 40K T1S | DSX2 LED F1 40K T2M MVOLT DSX2 LED P1 40K T1S MVOLT | 140 |
| C:/Users/ | | | L3 | 3 Lithonia L | ighting | MVOLT WDGE2 LED P5 35K | WDGE2 LED WITH P5 - PERFORMANCE | 48.44 |
| | | | SM1 | 1 Lithonia L | ighting | 80CRI VW WDGE2 LED P5 35K | PACKAGE, 3500K, 80CRI, VISUAL COMFORT WIDE OPTIC WDGE2 LED WITH P5 - PERFORMANCE | 48.44 |
| | | | SM2 | 2 Lithonia L | ighting | 80CRI VF LDN4 35/15 LO4AR LD | PACKAGE, 3500K, 80CRI, VISUAL COMFORT FORWARD OPTIC 4IN LDN, 3500K, 1500LM, CLEAR, MATTE | 17.5 |
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